

CALIFORNIA AND WESTERN MEDICINE

VOLUME XXVI

APRIL, 1927

No. 4

A PRE-CONVENTION MESSAGE FROM PRESIDENT McARTHUR

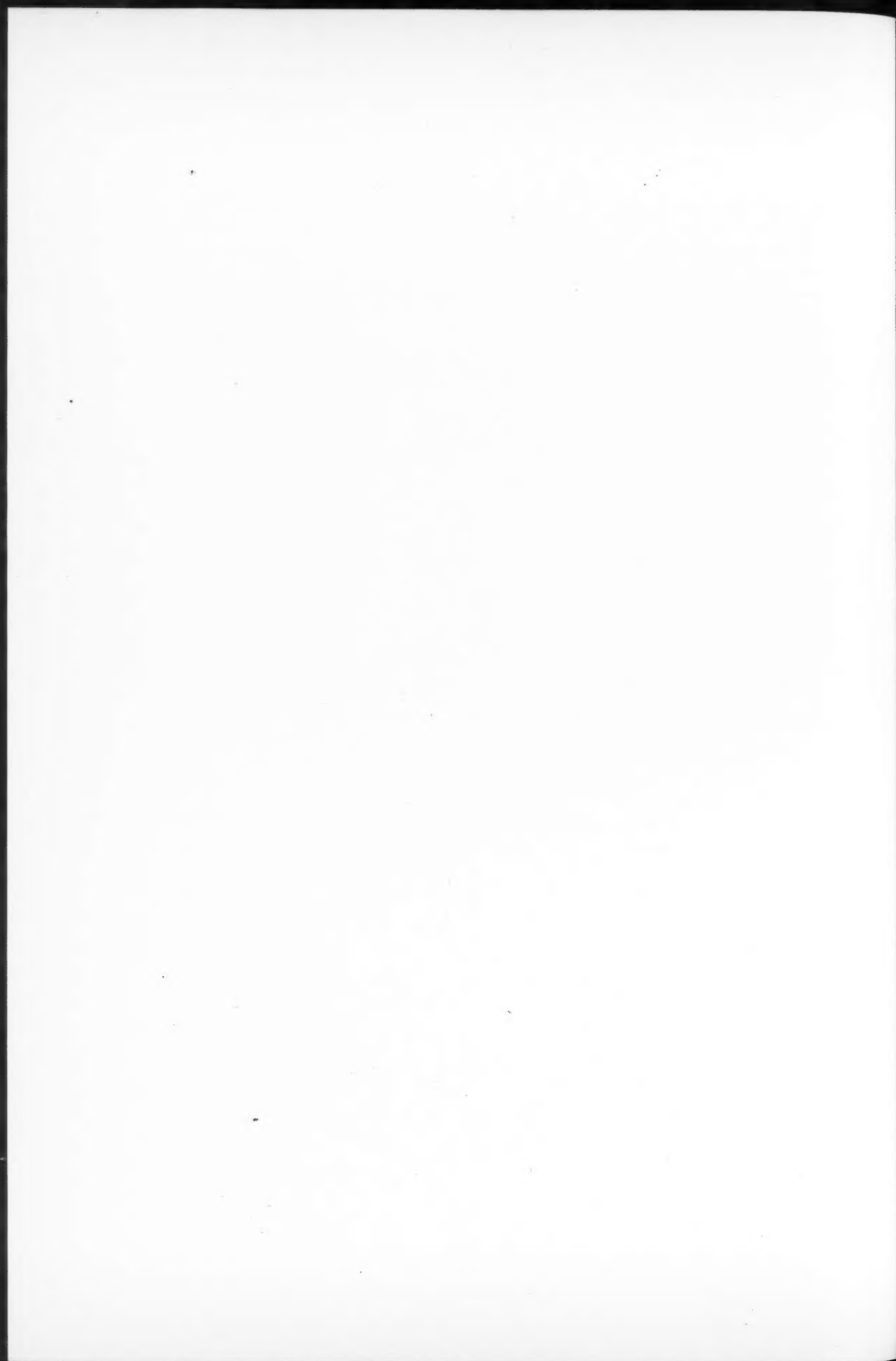
THE fifty-sixth annual meeting of the California Medical Association will open in Los Angeles, April 25, 1927, and continue in session for four days. The Program and Arrangement Committees have prepared a really interesting feast, and your president extends this official invitation to you to be present. We have secured men of international reputation for the program, and in addition it is fully expected that the Secretary of the Interior, Dr. Hubert Work, and the Surgeon-General, Dr. Hugh Cumming, will be with us during the convention. These will be four of the most important days in the year to every ethical physician in California. They will mean much, too, to the medical men of adjacent states and territories who also are cordially invited.

The man who does not attend these annual gatherings of his profession never realizes his loss, but he who is in the habit of being present and cannot, feels like making this notation in his diary: "Lost four precious medical convention days, each containing much of priceless value to me; no reward is offered for they are gone forever."

Medical knowledge accumulates with increasing rapidity as the years go by. The field of scientific medical literature is too large for any one individual to survey intelligently. The surest way to keep in touch with what has been accomplished, the best way to learn of the things that are of value, whether new or old, is through contact and discussion with your fellow practitioners.

The atmosphere of a convention is usually charged with new ideas and stimulates us to co-ordinate our own methods with the best in modern medicine. Apart from the scientific information one obtains at these meetings there is an added something of worth in the way of relaxation and sociability. In the field of scientific endeavor the tendency is to develop into specialties, but there is a larger field in which every educated, ethical physician can meet with profit on common ground—a field where the spirit of comradeship prevails, the field of mutual interest and good fellowship. The members of the California Medical Association are one big family—meeting once a year for "a feast of reason and a flow of soul."

Nothing is being left undone to make this the greatest meeting in the history of our Association. You should take advantage of your opportunity. Come with us and obtain your share of the profits accruing from the recent advancement in medical science and, at the same time, unite with your colleagues to make the gathering memorable by spreading a warming glow of professional fraternity.



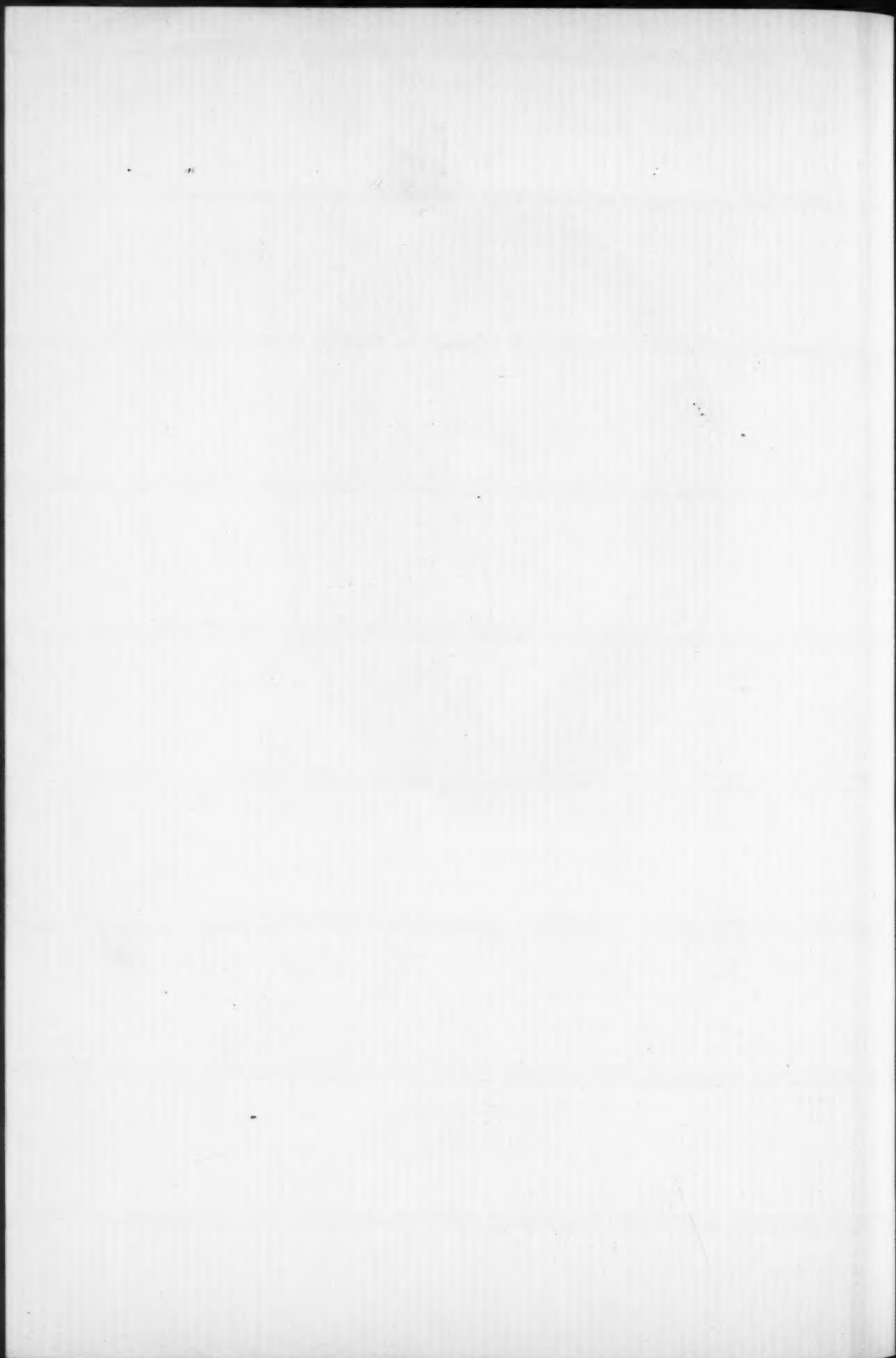


WILLIAM EVERETT MUSGRAVE

1869-1927

Brother, generous friend and genial fellow-worker, Dr. Musgrave spent his days in following out the highest humanitarian ideals. The work that he did in the survey of California hospitals alone would entitle him to the grateful remembrance of his fellow citizens. Through his unceasing and unselfish efforts as editor of *California and Western Medicine*, he brought the journal to the front rank of state medical publications in this country. But his crowning achievement was his contribution to knowledge in the field of medical research, for which he was starred in "American Men of Science," thus placing him among the one thousand investigators whose work, by the decisive vote of other scientists, has been of the greatest service to humanity.

*"A life so fine, with service as its cue,
Such tireless efforts for the sick forlorn,
That tongue nor pen can render homage due,
Save to thank God that such as he was born."*



BLOOD TRANSFUSION IN PERNICIOUS ANEMIA

By ERNEST H. FALCONER *

(From the Medical Department, University of California Medical School)

DISCUSSION by Arthur L. Bloomfield, San Francisco; Roy E. Thomas, Los Angeles; Ernest S. du Bray, San Francisco.

A CRITICAL analysis of the status of blood transfusion in pernicious anemia is presented in order to emphasize certain limitations of this method of treatment, and not with the purpose of minimizing the usefulness and importance of this procedure. The question always comes up for consideration as soon as the diagnosis of pernicious anemia is established. The laity seems to have a general impression that blood transfusion is of lasting value, if not actually curative, in this disease, and too often the family and relatives of a patient press the physician in charge for early decision and action. What should be our attitude concerning this important question? Certain features of the disease must be borne in mind in helping to form a decision. An important fact to remember is that the anemia present is only one manifestation of the disease and the underlying cause of this anemia is unknown. A blood transfusion does not remove this underlying cause, and it seems quite probable that the underlying cause is little influenced in any manner by this procedure. It has never been clearly shown that transfusion prolongs the life of a patient with pernicious anemia.

Jones,¹ in a recent contribution states, "what appears to be a cure in an occasional patient can be brought about by repeated small transfusions of from 100 to 450 cc. of whole blood at four-day intervals." This article is characterized by a tone of optimism somewhat at variance with the opinion of clinicians of extensive experience, as Richard Cabot² and Billings.³ To quote from Cabot, "I do not myself believe that the modern habit of treating pernicious anemia with transfusions prolongs life." Billings, in an interesting article on the present-day opportunities for the general practitioner, speaks as follows concerning pernicious anemia: "Under ordinary, good, rational management, with attention paid to the diet, the avoidance of fatigue and other hygienic measures, the patient's life will be conserved, as a rule, quite as long as if he submitted to all the modern measures practiced, including splenectomy and blood transfusions." Landis⁴ distinctly condemns transfusion in pernicious anemia. He refers to Lichty's discussion on this subject in the *Therapeutic Gazette* (July, 1926). Lichty is of the opinion that such patients with transfusions will die sooner than those without, because each patient has a certain number of remissions to look forward to and transfusion simply hurries him through the entitled number of remis-

sions. He admits, however, that in a case with immediate danger a transfusion may tide a patient over the crisis. Evans,⁵ in his book on pernicious anemia just published, states: "If one expects too much from blood transfusion he will be disappointed. An analysis by Bloomfield to determine what benefit, if any, is to be derived from this method of treatment showed that life was not prolonged by it."

In order to appreciate the limitations of blood transfusion in the syndrome called pernicious anemia, we must enlarge our conception of this syndrome beyond the idea that it is due to a primary disease of the bone marrow, with all the symptoms secondary to the anemia present. We are, on the contrary, dealing with a systemic intoxication of widespread distribution involving at least the gastrointestinal tract, the nervous system, the liver, kidneys, and heart, as well as the blood-forming organs. The blood may not show any marrow disturbance until the disease has been present for some time, and only then, when the toxin or hemolytic agent begins to destroy blood cells in excess of the ability of the blood-forming organs to put out new cells. It is this hemolysis or destruction of the red cells, plus a depressing or inhibiting effect of the toxic agent on the bone marrow that causes the blood picture associated with the disease. This same blood picture is seen in certain cases of syphilis, of malignancy, and also in sprue. When a remission occurs in pernicious anemia the toxic agent is apparently neutralized or ceases to be formed, and then the bone marrow, left free to work unimpeded, seems to have plenty of materials and soon replenishes the circulating blood. If it has not been permanently damaged or crippled it may be able to regenerate an almost normal number of formed elements in the blood.

These remissions are fairly characteristic and constant in every case of pernicious anemia; just how they are brought about is not known. Our efforts at treatment are usually directed toward supporting a patient through a relapse until a remission occurs. Can transfusion during a relapse check the progress of such a relapse and bring about a remission? The evidence on this point is not entirely convincing because the mechanism of a remission is not understood. They occur without any treatment, and quite satisfactory remissions may occur after very serious relapses. Minot⁶ expresses the opinion that the chances of a spontaneous remission occurring when a case is seen in relapse is in the vicinity of 35 per cent. Transfusion in all types of pernicious anemia taken together appears to bring about 10 to 20 per cent more remissions than occur spontaneously. One of our clinic cases was admitted to the Medical Service of the University of California Hospital in 1924, in coma and with pulse so feeble that he was considered "in extremis." He had been under observation about eighteen months and was found to have considerable hemolysis. At intervals during this period transfusions had been given with only slight temporary benefit. When he entered in such critical condition that it seemed only a matter of a few hours before the end, it was decided not to transfuse him. Instead of death during the night the morning brought some improvement, although he was delirious and very restless. By the third day, after admission, he was sitting up reading the news-

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paper and his bone marrow response was one of the most remarkable we have ever witnessed. The reticulated cells ran as high as 80 per cent of the total number of red cells. His remission was very satisfactory and lasted for over a year. This case is cited to show the difficulty in deciding just how much transfusions accomplish. Had we given this patient a transfusion it would have received much more credit than it deserved. The data at our disposal indicates that transfusion may assist in bringing about a remission and may, in some cases, check the progress of a relapse. There are no definite contraindications to transfusion except questionable compatibility of the blood. We know, however, that after several transfusions the recipient develops antibodies to the donor's blood and serious reactions may take place. Bowcock⁷ has shown that the number of transfusions a patient may take are limited. At times, after ten or twelve transfusions, a recipient may develop agglutinins to the cells of any donor's blood. In such case one has to resort to intramuscular administration of blood. At times, after several transfusions, the recipient may develop antibodies or agglutinins for the donor's blood and the incompatibility may not show in the "blood-matching" tests. Then again, serious reactions will sometimes occur after proper grouping and "blood matching." These, fortunately, are very rare.

It seems unwise to give a transfusion in the face of active hemolysis, unless special features in the case demand it. A good index of hemolysis is the Van den Berg test in the serum or the Schleissenger test for urobilin in the urine. The intense, lemon-yellow color of the patient, with palpable enlargement of the spleen, are clinical evidences of increased hemolysis. Where hemolysis is active the blood from the transfusion may be destroyed in a short time. When a patient is extremely weak, with blood very low, it is a question of clinical judgment whether transfusion should be done, especially if the patient is seen for the first time. Even a slight reaction might be sufficient to cause a fatal termination.

When a cause is studied for the first time, and it is noted that the reticulated cells are above 2 per cent and are increasing, this may be taken as a sign that the marrow is actively regenerating. These reticulated red cells are readily brought out by staining a drop of fresh blood with .5 per cent alcoholic solution of brilliant creyls blue. Slides may be prepared by spreading the creyls blue on the slide and allowing the solution to evaporate, leaving the dry stain behind. These slides are kept on hand for use as desired. If, in addition to an increase of reticulated red cells, the proportion of neutrophyles is increasing, the eosinophylic proportion is rising, and the platelets increasing, a remission may be predicted, and it is sometimes better in the event of such evidence not to resort to transfusion. A sudden accession of transfused blood at such period may cause the marrow to cease its activity for a time. The physiological stimulus to the bone marrow of a marked deficit in the manner of red cells and hemoglobin is the greatest stimulus that can possibly be applied, and to have recourse to blood transfusion in the hope of stimulating still further the production of blood cells is too much like "whipping up" the tired horse who is already doing his utmost. A

small transfusion of 200 or 300 cc. of whole blood may be of value after a remission is in progress, in furnishing the system with materials for building the stroma of red cells. Whipple⁸ has emphasized the necessity for materials for building the stroma of cells in pernicious anemia. In transfusion the new blood may furnish complement and certain antibodies to neutralize the toxins present in the recipient's blood. When a patient is having distressing symptoms referable to the gastrointestinal tract, as vomiting, anorexia and diarrhea, and is extremely weak and dyspnoeic, a transfusion may alleviate these symptoms and make for greater comfort. There seems also to be some evidence that the remissions occurring after transfusion may be of longer duration and of somewhat better character as to the patient's general condition and strength than where transfusion is not employed. This is especially true where previous remissions have not been of a satisfactory character. There is a definite place for transfusions in the treatment of pernicious anemia, but they should not be used before a carefully worked out diagnosis has been made and they should never be given without thoughtful consideration as to the needs of the patient. The possibility of an unsatisfactory result should be explained to those responsible for the care of the patient. There seems to be a justifiable hope that the treatment of pernicious anemia by diet, as recommended by Minot,⁹ will cut down the need for transfusion. The ability to bring on a remission by means of this special diet, obviating the necessity of transfusions, would constitute a distinct advance in treatment of this disease.

SUMMARY

There is no convincing evidence that transfusions prolong the life of a patient with pernicious anemia. They may be employed to bring on or hasten a remission, especially when the clinical progress of the patient is more or less stationary. It is probably better when a remission is imminent not to give a transfusion, as this may have the effect of slowing up the efforts of the bone marrow. It should be remembered that the number of transfusions which a given patient may take is limited, therefore they should not be used without some definite indications.

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DISCUSSION

ARTHUR L. BLOOMFIELD, M. D. (Stanford Medical School, San Francisco)—I am quite in accord with the general results of Doctor Falconer's paper.

Some years ago we analyzed¹ very carefully the re-

1. *Bulletin Johns Hopkins Hospital*, 1918, Vol. 23, p. 101.

sults of transfusion of blood in twenty-six patients with pernicious anemia who were followed over long periods of time. One hundred and one transfusions were given and individual patients received from one to seventeen, the largest total amount of blood being 8700 cc. and the smallest 300 cc. The single transfusions varied in amount from 300 to 900 cc. The results of this analysis brought out no evidence that the total duration of life was prolonged by the treatment, nor did transfusions seem to be of definite value as an emergency measure in tiding patients over at a time when the blood count was very low. Of nine patients entering the hospital with blood counts of under a million and receiving transfusion, six improved and left the hospital and three, or 33 1/3 per cent, died; whereas of ten other patients with counts under a million who did not receive transfusion, eight improved and two, or 20 per cent, died.

The most important conclusion seemed to be that the time when transfusion is done is of particular importance. If the patient is in a refractory state, which is usually the case during the relapse, transfusion seems to have little effect. On the other hand, if performed at a time when the patient was not refractory (i. e., when spontaneous remission was imminent or had commenced), improvement seemed to be brought on in about one-half the cases, and it was possible to raise the blood count to a higher level than it usually reaches spontaneously. Such artificial plethoras did not increase the duration of the remission, although the patients usually had a sense of well-being while the count was high.

As Falconer points out, the anemia is evidently only one of a number of harmful effects which are produced by whatever agent is responsible for pernicious anemia, and it is quite obvious that transfusions at best can do no more than aid in temporary improvement in selected cases.

ROY E. THOMAS, M.D. (1136 West Sixth Street, Los Angeles)—In the treatment of any disease it is difficult to see how the patient can be permanently benefited by a therapeutic measure directed against one of its symptoms.

Falconer has clearly shown in his paper that transfusion of blood does not materially prolong life in the great majority of cases of pernicious anemia in which it is used. He has gone a step further and given theoretical reasons for believing that no better results could be expected.

For obvious reasons it is particularly difficult to determine the value of any therapeutic measure in a disease which is characterized by spontaneous remissions. Only by such careful blood studies as Falconer has made can the reaction of the bone marrow to transfusions in pernicious anemia be determined and thus enable us to avoid their use when they are likely to prove of no benefit or even harmful.

I do not believe we are ready to dispense entirely with transfusions in pernicious anemia. Falconer states that they bring about 10 to 20 per cent more remissions than occur spontaneously. If this is true life is probably prolonged in some instances, for Lichty's view that every case of pernicious anemia has just so many remissions to look forward to seems absurd. Also many times transfusions seem to add much to the comfort of the patient and are thus quite worth while.

However, I have recently had the opportunity to observe for a considerable period three cases of pernicious anemia which had presented symptoms of the disease for 8, 12, and 15 years, respectively. One had a splenectomy followed by hydrochloric acid in large doses. The second had many transfusions which seemed to add much to her comfort. The third who has had neither splenectomy nor transfusions is the only one left alive to eat liver.

ERNEST S. DU BRAY, M.D. (University of California Medical School, San Francisco)—Falconer's timely warning about the thoughtless use of blood transfusion in the treatment of pernicious anemia is but a reflection of the opinion of many of the most careful students of the hematopoietic diseases. He has defined quite clearly the limitations of its use and at the same time he indicates certain pitfalls which may attend the method. It is pleasing to see that he stresses the point that the decision for

or against transfusion is frequently a matter which demands extremely sound clinical judgment. Another important phase which he mentions and which I feel is worth re-emphasizing is the possibility of a severe reaction in a patient who, because of repeated transfusions, has developed antibodies for compatible bloods. It is now agreed that transfusion never cures pernicious anemia, and the patients in whom the best results are obtained are those who are most likely to have a spontaneous remission and who react best to any treatment. The procedure must be regarded as a useful and often effective method for the alleviation of distressing subjective symptoms, and in rare and carefully selected cases may even be a life-saving measure.

CHRONIC APPENDICITIS

A STUDY OF 202 CONSECUTIVE CASES

By HERSEL E. BUTKA *

"THERE are two types of appendicitis," says one author, "one acute, and the other for revenue only," while some others ask the question, "Is chronic appendicitis a myth?"

Investigators are at variance as to the pathological findings in chronic appendicitis. Ribberts states that the normal appendix is always empty, while Aschoff claims that 62 per cent of normal appendices contain feces. Roentgen ray examination shows that the appendix fills, empties, and alters its shape periodically. There may be pathological conditions present that cannot be proved by the anatomist or histologist, but can be demonstrated roentgenologically by the finding of a large open canal which fills easily but is unable to properly empty and retains this material over long periods of time.

The rôle of hard fecal material and foreign bodies in the pathogenesis of chronic appendicitis is somewhat disputed, but probably should be recognized. Because of the well-known frequency of these bodies in acute appendicitis, their presence will be considered proof of chronic appendicitis in this paper.

Eastman states that many cases of so-called chronic appendicitis must be considered as due to malposition, adhesions and kinks, with little microscopic pathology. Aschoff's description of changes in chronic appendicitis enumerates the findings briefly as "stenosis, induration of wall, retention of mucus, fecal masses, adhesions and kinking." He believes that chronic appendicitis is never primary but is always due to a previous acute attack or attacks, many times occurring during childhood and simply called "stomach ache."

According to Mallory, "during repair, the appendix is often infiltrated with numerous eosinophiles, and the lymph vessels filled with lymphocytes. The appearance presented by appendices in the various stages of repair is often spoken of as chronic appendicitis, but this term is not justified."

The microscopic appearance of the appendix varies normally. The coats vary in thickness with age. Lymphoid tissue is greatest in the young, while

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CHART No I NATURE OF CASES		NUMBER	SEX		TEMP.		SYMPTOMS					LABORATORY FINDINGS						
			M	F	NORMAL	INCREASED	TENDERNESS	PAIN-ABD.	RIGIDITY	VOMITING	WHITE BLOOD COUNT				WASSERMANN +	WALKER'S INDEX OF RESIST.		
											NUMBER	NORMAL	INCREASED	PERCENT POLYNUCLEAR				
1 APPENDICITIS CHRONIC	No	81	30	51	29	52	68	51	47	21	12,667	40	41	79	2	-2.3		
	%	40	37	63	36	64	84	63	58	26		49	51		24			
2 CHOLECYSTITIS	No	12	-	12	9	3	7	6	1	1	11,100	8	4	75	0	-1		
	%	5.9	-	100	75	25	58	50	8.3	8.3		66	34		0			
3 SALPINGITIS	No	14		14	7	7	10	14	2	5	12,700	6	8	82	1	-1.5		
	%	6.9		100	50	50	71.5	100	14	35		43	57		7			
4 UTERINE SURGERY	No	25		25	13	12	18	12	2	6	8,700	17	8	76	3	-3.5		
	%	12.3		100	52	48	73	48	8	24		69	32		12			
5 HERNIA	No	7	4	3	4	3	1	1	0	1	7,500	6	1	65	1	-		
	%	3.4	57	43	57	43	14	14	0	14		86	14		14			
6 MISCELLANEOUS	No	63	5	58	31	32	22	26	5	6	9,250	42	21	75	3	-3.5		
	%	31.2	8	92	49	51	34	41	8	9.5		66	33.3		5			

it atrophies in later years. Similar changes to a minor degree occur in the other coats.

With this brief introduction the following questions present themselves for our study:

(1) Is chronic appendicitis a clinical or pathological entity? (2) What changes are found in the atrophic and obliterated appendix? (3) Is the presence of eosinophiles in the apparently normal and so-called chronic appendicitis a pathological change? (4) Can chronic appendicitis be determined from a microscopic study of the organ?

This paper is a review of 202 consecutive surgical cases with appendectomy occurring in the White Memorial Hospital during a period of approximately two years. It was inspired by my study of many appendiceal sections that I might arrive at some conclusion as to the microscopic appearance of a normal appendix.

The cases are grouped as: (a) appendices removed from patients with clinical chronic appendicitis; (b) appendices in which operation was secondary to gall bladder disease; (c) appendices in which removal was secondary to inflammatory pelvic disease (salpingitis, etc.); (d) appendices removed during operation on uninfamed pelvic organs (uterus, etc.); (e) appendices removed during repair of hernia; and (f) miscellaneous.

Is chronic appendicitis a clinical or a pathological entity? In comparing the first group of the chart, which covers eighty-one patients diagnosed and operated on for chronic appendicitis without a change in diagnosis following operation, with the remaining series, I find a definite increase in average diameter of the appendix, as well as the number containing

feces. There is apparently no variation in the number containing fecoliths. A few contain foreign bodies. A greater percentage show adhesions, kinks, Jackson's veil, or obliterative and atrophic changes. However, the differences between those appendices definitely normal as far as symptomatology is concerned, and those diagnosed as chronic appendicitis, are not marked. The finding of adhesions, kinks, Jackson's veil, hard feces, foreign bodies and mucus would account for only 34 per cent of those diagnosed as chronic appendicitis, while in Groups 4 and 6 there are 40 per cent and 41 per cent, respectively, revealing some of these changes.

In view of these findings I conclude that chronic appendicitis must be frequently functional, and is more of a clinical than a pathological entity.

Can chronic appendicitis be determined by a microscopic study of sections? An acute inflammation can be diagnosed by the presence of large numbers of pus cells throughout the tissue with varying numbers of other cells brought out later in the stage of repair, such as eosinophiles, round cells, plasma cells, and fibroblasts. A subacute inflammation is diagnosed in much the same way, but when we attempt to determine the earmarks of a chronic inflammation of the appendix we immediately encounter difficulties which appear to be insurmountable. The mucosa and lymphoid coats of the appendix undergo many changes during life which must be considered within normal limits.

In studying appendices microscopically, eosin-

CHART No II MACROSCOPIC			NUMBER	SIZE	CONTENTS					ADHESIONS ETC.					ATROPHIC OBLITERATIVE CHANGES	TOTAL GROSS PATHOLOGY	
NATURE OF CASES.		1			MUCUS-BLOOD OR PUS	THIN FECES	FECALITHS	FOREIGN BODIES	1	+	+	KINKS	JACKSON'S VEIL	PRESENT		ABSENT	
1 APPENDICITIS CHRONIC	No	81	6x.9 cm	15	20	38	6	2	59	9	9	4	2	4	28	53.	
	%	40		18.5	24.6	47	7.4	2.4	73	11.1	11.1	5	3	5	34	66	
2 CHOLECYSTITIS	No	12	7.3x.6 cm	6	2	3	1		10				2	3	-	-	
	%	5.9		50	16.6	25	8.3	0	83				16	25			
3 SALPINGITIS	No	14	5x.8 cm	3	4	7		0	8	3	3	1		3	-	-	
	%	6.9		21.4	28.5	50		0	57	21.4	21.4	7		21			
4 UTERINE SURGERY	No	25	5.5x.6 cm	5	3	14	3		21	2	1		1	1	10	15	
	%	12.3		20	12	56	12	0	84	8	4		4	4	40	60	
5 HERNIA	No	7	6.3x.6 cm	2	2	2	1		7					1	-	-	
	%	3.4		28.5	28.5	28.5	14.2	0	100					14			
6 MISCELLANEOUS	No	63	57x.7	20	17	17	7	2	56	4	2	1		3	26	37	
	%	31.2		31.7	27	27	11	3.1	88.8	6.3	3	1.5		4.7	41	59	

ophiles are found in large numbers, located chiefly in the mucosa. Occasionally there is found a few polynuclear leukocytes. My records reveal no noticeable difference in these findings in clinically diagnosed chronic appendicitis, and Groups 2-6 of my series. Leukocytes are never numerous in the mucosa and deeper tissues and only slightly more frequent in chronic appendicitis than in the control groups of apparently normal appendices.

A study microscopically of the thickness of the various histological layers of the appendiceal wall reveals no variation in the lymphoid and submucous coats and only a slight thinning of the muscular coat.

The microscopical findings in chronic appendicitis as diagnosed clinically fail to reveal anything pathologically specific, or that are not found in appendices without symptoms.

What changes are found in the obliterated and atrophic appendix? The number in this class is too small for definite conclusions. In this study, however, the percentage with these changes is higher in Groups 2-6 than in Group 1 with clinically chronic appendicitis. Of the fifteen patients of all the groups the history reveals a previous acute attack in at least twelve. With an 80 per cent positive history, and our knowledge of the degenerative changes occurring in the lining of this organ during an acute attack, it may be readily seen how the destroyed mucosa is replaced by adhesion of the raw surfaces

and obliteration of the lumen. Apparently only a small percentage of these appendices cause further symptoms, and microscopically no evidence of inflammation remains other than obliteration of the lumen.

What is the rôle of eosinophiles in the normal and chronic appendicitis? Eosinophiles in the tissues are usually looked upon as a sign of chronic inflammation. They are found in the lymph nodes of Hodgkin's disease, in the cervix associated with inflammatory lesions and malignancy, and in the walls of pus tubes and infections of the gonorrheal type. They are also found in the secretions of bronchial asthma, in polypi, and inflammation of the mucous membranes of the nose and throat, as well as in many other conditions.

Eosinophiles were present in the mucosa of all my cases in Group 1, while in Groups 2-6 they are found in over 95 per cent. With further sections and study this percentage would be somewhat higher, as I have failed to find an appendix which possesses a mucosa in which varying numbers of eosinophiles cannot be demonstrated. The conclusion seems obvious, therefore, that eosinophiles in the appendiceal mucosa is a normal condition, or that over 95 per cent of people generally suffer from chronic appendicitis. On the other hand, if eosinophiles in the appendiceal mucosa does not always denote inflammation there must be some reason for their invariable presence. They may be associated with the protective mechanism or with the glands of internal

CHART No. III
MICROSCOPIC

CHART NO. III MICROSCOPIC		NUMBER	MUSCLE COAT			SUBMUCOSA			LYMPHOID				MUCOSA								DEEP INFILTRATION OF EOSINOPHILS & POLY'S
			NORMAL	THIN	+	NORMAL	THIN	+	NORMAL	THIN	+	+	EOSINOPHILES				POLYNUCLEARS				
													FEW	+	+	+	+	OCCASIONAL	+		
1 APPENDICITIS CHRONIC	No	81	18	25	23	28	10	43	27	9	23	12	0	8	17	31	17	14	6	61	23
	%	40	27	38	35	35	12	53	38	12	32	17	0	11	23	42	23	17	7	75	28.3
2 CHOLECYSTITIS	No	12	4	4	3	2	6	4	5	3	4	5	3	1	2	2	4	6	2	4	4
	%	5.9	36	36	27	17	50	33	41	25	34	25	8	16.5	16.5	33	50	16.5	33	33.5	33.5
3 SALPINGITIS	No	14	1	4	9	5	3	6	3	1	7	3	2	1	5	3	3	7	-	7	2
	%	6.9	7	28.5	64	36	21.5	42.5	21	7	49	21	14	7	35.5	21	21	50	0	50	14
4 UTERINE SURGERY	No	25	10	5	10	6	6	13	7	3	7	8	2	4	5	9	5	1	21	3	13
	%	12.3	40	20	40	24	24	52	28	12	28	32	8	16	20	36	20	4	84	12	52
5 HERNIA	No	7	1	3	3	4	1	2	2	2	3	-	1	2	2	2	4	1	2	1	1
	%	3.4	14	43	43	57	14	28.6	28.5	28.5	43	-	14	28	28	28	57	14	28	14	14
6 MISCELLANEOUS	No	63	15	19	29	13	12	38	26	7	18	12	3	2	19	23	16	15	6	42	15
	%	31.2	24	30	47.6	20.6	19	60.4	41	11	29	19	4.7	3	30	36	25.5	24	9	68	24

secretion. There is no evidence to indicate internal secretion from the appendix. This brings up the question of, "what is the function of the appendix?" Many theories have been advanced, most of them promptly disproved, but I believe that if this subject were better understood the question of the eosinophiles would be answered. If the appendix secretes mucus the problem is simpler, as eosinophiles are very closely associated with mucus formation, and are found chiefly in mucous membranes. I conclude, therefore, that the presence of eosinophiles in the mucous membrane of the appendix is normal.

A few items of general interest are brought out by this study. Of the 202 consecutive cases 80 per cent were females. The blood count in chronic appendicitis gave an average of 12,660 white cells, and the percentage of polynuclears is somewhat elevated, while in Groups 4, 5, and 6, the leukocyte count is quite normal. The average count for cholecystitis and salpingitis approached that of chronic appendicitis.

Although this study is incomplete, I believe the findings justify at least in part the following conclusions regarding pathological conditions in appendices removed by operation:

1. Chronic appendicitis often is a clinical condition resting more on a functional than a pathological basis.

2. Obliterative and atrophic appendices are the result of previous acute pathological processes and

are not found in increased numbers in cases diagnosed clinically as "chronic appendicitis."

3. Eosinophiles in the mucosa of the appendix is no indication of chronic appendicitis, but is probably a link in the defensive mechanism and is normal.

4. Eosinophiles and leukocytes in the submucosa and muscularis is positive evidence of inflammatory changes in the appendix.

5. Chronic appendicitis cannot be determined in more than an extremely small percentage of instances by the histological examination alone.

6. Complete data on gross findings at operation are essential to a correct diagnosis.

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DISEASES AND ABNORMALITIES OF THE FEMALE URETHRA

By WILLIAM E. STEVENS, M. D.

(From Stanford University Medical School and the
San Francisco Polyclinic)

The frequency with which pathologic conditions are found in the female urethra and the necessity for a careful examination of this organ in the presence of symptoms referable to the urinary tract is worthy of emphasis.

Discussion by Nathan G. Hale, Sacramento; P. N. Jacobson, Oakland; Anders Peterson, Los Angeles; Herbert A. Rosenkranz, Los Angeles.

THE female urethra is too often considered merely as an avenue of approach to the bladder and upper urinary tract and the frequency of lesions of this organ completely overlooked in the consideration of the etiology of urinary disturbances so common in this sex. The fallacy of this conception is demonstrated by the large number of patients with urinary symptoms, due exclusively to pathological conditions of the urethra.

In Bugbee's¹ statistics, which comprise 1000 cases of frequency of urination in women, lesions of the urethra were present in 690 instances. In a study of the last 234 consecutive female patients complaining of various urinary disturbances that have come under my observation the urethra was wholly responsible for the symptoms in 56 and partly responsible in 173 instances.

The lesions encountered were: stricture in 120 patients, urethritis in 68, caruncle in 8, polypi in 7, papillomata in 5, prolapse in 2, hypospadias in 2, calculus in 1, and urethrocele or diverticulum in 1.

URETHRAL GLANDS

Contrary to popular opinion the female urethral mucosa contains a large number of small mucous glands and lacunae. These are more numerous anteriorly. On the posterior wall of the urethra, usually just within the external meatus, lie the two openings of Skene's glands. The orifice of another large gland on the anterior wall near the external meatus is frequently infected and should not be overlooked. Skene's glands are occasionally located outside the meatus. Additional paraurethral ducts and glands are sometimes found external to the urethral orifice. Contrary to the experience of some observers I find Skene's glands are often infected.

EXAMINATION OF THE FEMALE URETHRA

The urine should be held for several hours before examination if possible.

With the patient in the dorsal position the labia are separated at their upper margins with the thumb and index finger of the left hand and the meatus cleansed with sterile gauze. Pressure is then made on the meatus between the left thumb and right index finger and discharge, if any, obtained for examination. Following this the urethra is carefully palpated. It is then milked from behind forward and any excretion appearing at the meatus is transferred to glass slides by means of a platinum loop or cotton-tipped applicator for examination. Even in the absence of visible discharge urethritis is frequently present.

If properly performed, the two-glass test is a

valuable diagnostic procedure. Following thorough douching of the vagina and cleansing of the vulva the urine is passed into two glasses. With infection limited to the urethra, the first glass will be turbid, often contain threads, and pus cells will be found on microscopic examination. Unless the discharge is very profuse the second glass will be clear.

The urethra is next calibrated with olive-tipped bougies, and if a stricture is found it is treated as described under stricture of the urethra before further examination is made.

Following calibration the anterior third of the urethra is examined through a Moore skenescope. This instrument is also a most useful adjunct in the treatment of lesions of this portion of the canal.

The patient is then catheterized and in the absence of stricture placed in the knee-chest position for urethroscopy. I have found the McCarthy anterior urethroscope which has the lamp at its distal extremity, or the Kelly urethroscope using light reflected by means of a head mirror very satisfactory for this purpose.

Water dilating, near vision instruments, such as the McCarthy cystourethroscope or the Brown-Buerger universal cystoscope are most valuable for the deeper portion of the urethra. Papillomata, polypi, and other pedunculated growths which may lay against the urethral wall and may consequently be overlooked, will be seen floating in the field with these types of instruments. The detection of chronic urethritis without discharge, which is very common in women, is impossible without urethroscopy.

URETHRITIS IN THE FEMALE

Although usually caused by infection with the gonococcus, urethritis due to other organisms such as the colon bacillus is by no means uncommon. The proximity of the female urethra to the vagina and rectum often is responsible for ascending infections. In the examination of approximately 1064 women arrested for prostitution or vagrancy² with gonorrhea of the cervix, urethra including Skene's glands or the Bartholin glands, the majority chronic, gonococci were found in the urethral secretion in 32 per cent. When gonorrhea is present the percentage of urethral infections is considerably greater in virgins or those whose vagina is less readily entered. The urethral glands, especially those of Skene, are very frequently involved and it is to infection of these structures that the prolongation of the disease and its resistance to treatment is usually due.

MALFORMATIONS

With one exception, a narrowing or stricture at the external meatus, congenital defects of the female urethra are much less common than in the male.

HYPOSPADIAS

Although comparatively rare in the female a number of cases of this condition have been reported. As in the male it is due to defective development of the anterior urethral wall, and the position of the external urethral meatus may be but slightly posterior to its normal location or the entire urethral wall may be absent; the condition then resembling a vesicovaginal fistula. In a patient recently seen at

the San Francisco Polyclinic the meatus was located 3.5 cm. behind its usual position; another hypospadias had resulted from an operation for a growth on the clitoris some years before coming under my observation. As in hypospadias in the male the meatus is frequently constricted and all of the symptoms accompanying urethral stricture may then be present. If the meatus opens into the vagina dribbling is a prominent symptom and the skin of the vulva and thighs is often excoriated. Cases have been reported of extensive defect of the anterior urethral wall with involvement of the sphincter and incontinence of urine.

A constricted meatus should be incised unless it yields readily to dilatation. If the defect in the urethral wall is extensive, reconstruction by plastic operation is advisable. This is accomplished by bringing together over a catheter two lateral flaps of the vaginal mucosa sufficiently long to replace that portion of the urethra which is missing.

EPISPADIAS

This malformation, which is due to defective development of the anterior urethral wall, is likewise rare in the female. When it exists the meatus may be located just below the clitoris, just above the clitoris, or the urethra may open behind the symphysis; a type of deformity usually associated with separation of the pubic bones, partial or complete extrophy of the bladder and defective sphincters. Partial incontinence of urine usually accompanies the second, and complete incontinence the latter type of epispadias; the adjacent skin is usually badly irritated.

In the second and third types of epispadias accompanied by partial or complete incontinence, restoration of the sphincters by plastic operation has been recommended, but exclusion of the bladder and urethra and transplantation of the ureters or nephrostomy is usually necessary.

DOUBLE URETHRA

Instances of complete and incomplete double urethra have been reported. Dannreuther's patient² had a complete double urethra with a caruncle at one of the meati. She complained of frequency of urination accompanied by a burning sensation, which disappeared, however, after removal of the caruncle. Absence of the urethra and atresia of the urethra have been reported, but are extremely rare.

STRICTURE OF THE FEMALE URETHRA

Strictures of the urethra are now beginning to receive the recognition they deserve as important etiologic factors in genitourinary tract disturbances in women and female children. The significance of urethral obstructions as factors in the production and prolongation of urethral infections seems obvious when we take into consideration the fact that the urethral orifice is often bathed in purulent secretion without producing urethritis in the normal urethra and the immediate improvement which follows dilatation in an urethritis associated with stricture. While comparatively uncommon in the deeper portion of the canal, strictures are often

found at or just inside the meatus. Obstructions at this point, whether congenital or acquired, are responsible for symptoms which improve rapidly under dilatation.

Strictures of the urethra of inflammatory origin usually occur at or just within the meatus, and the most common etiologic factors are infection, usually gonorrheal, and ulceration. Strictures caused by trauma are found both at the meatus and in the lumen of the canal, and are usually the result of childbirth or operative procedures.

Frequent urination is the most common symptom of which these patients complain. It occurred in over 85 per cent of my patients. The next most frequent complaint is pain, which may be referred to the urethra, bladder, sacral, inguinal, or one or both lumbar regions. Burning or smarting, urgency, difficulty, constant desire to urinate, partial incontinence and dribbling are occasionally present. Residual urine is seldom found except in the presence of very tight strictures.

Although a stricture can be seen through the urethroscope, and is often palpable through the vagina, the diagnosis is best made by means of the olive-tipped bougie. A sound, or urethrotome, is much less reliable, as strictures of the female urethra usually yield readily to slight pressure, and consequently higher readings result from use of the latter instruments. Ordinarily no "hang" or "tug" should be detected on withdrawal of a F. 26 bougie through an unobstructed urethra.

It is not unusual to find the voided urine of patients with strictures chemically and microscopically negative, although as a rule it contains a few pus cells, owing to the urethritis and trigonitis with which it is commonly associated. Often symptoms ascribed to some other condition, such as ureteral stricture, are due to an urethral obstruction.

Although rapid dilatation is occasionally indicated, the majority of urethral strictures should be treated by means of gradual dilatation, absorption of the constricting exudate being best promoted by this procedure. Meatotomy, internal urethrotomy or external urethrotomy with resection of scar tissue are sometimes necessary. A straight dilator or sound of the same size as the stricture is first introduced. The sounds are increased two numbers at each treatment until an F. 30 passes without difficulty. It is advisable to avoid marked trauma or severe pain following treatment. After the withdrawal of the sound a few cc. of 10 per cent argyrol or 1 to 3 per cent silver nitrate solution are injected. At first treatments should be given twice a week, but the interval is gradually lengthened to once a month and then often may be discontinued. Preceding dilatation the use of a local anesthetic, such as a 10 per cent solution of cocain on a cotton-tipped applicator is often advisable, especially in nervous women.

The majority of strictures are soft infiltrations in which the symptoms improve, as a rule, after two and disappear after five treatments, recurrence being very unusual if treatment is not too abruptly discontinued.

In the presence of many of the hard infiltrations

internal urethrotomy is often advisable, otherwise dilatation is necessary at frequent intervals for an indefinite period of time.

NEOPLASMS OF THE FEMALE URETHRA

The common benign tumors of the female urethra are the polyp, papilloma, and caruncle. The malignant tumors are the carcinoma and sarcoma. The former is uncommon and the latter very rare.

POLYPI AND PAPILOMATA

Polypi and papillomata are finger or fern-like projections from the surface of the mucosa. They are quite common and are usually located in the proximal third of the urethra just outside of the bladder sphincter, although sometimes found at the external meatus or in the middle or lower third of the canal. They are probably due to irritation from an accompanying or pre-existing infection, although frequently seen in an otherwise normal urinary tract. They may attain considerable size without causing symptoms. At other times they are responsible for frequent and painful urination, and if grasped by the internal sphincter may produce severe irritation and considerable bleeding. In one of my patients with three polypi located at the external meatus, bleeding occurred spontaneously on two occasions and also followed urethroscopy. In many patients with polypi at the bladder sphincter who have come under my observation, subjective symptoms were absent. As previously stated they are readily seen through a close-vision urethroscope using water dilatation, but are frequently overlooked if only the ordinary urethroscope is used, as they often lay flat against the urethral wall which they closely resemble.

H. R. Schmidt recently reported a very unusual case in which a tumor of the urethra the size of a plum caused the anterior wall of the vagina to protrude. It consisted of five large and four small polypi beneath which, in the urethral submucosa and muscularis, lay numerous cysts varying in size up to 2 millimeters. The patient had been treated for years with strong caustics. Cystic formations in the wall of the female urethra are very rare.

CARUNCLES

Caruncles are usually the product of chronic inflammation of the mucous membrane of the urethra. They cause more discomfort and pain than any other urethral growths. They are prone to recur even after most radical treatment and many consider them to be potentially malignant. They are responsible for frequent and painful urination and are usually extremely sensitive. Neurasthenia and loss of weight are not uncommon, although caruncles may exist without subjective symptoms.

Following the application of a 10 per cent solution of cocaine, they may be satisfactorily removed by fulguration or diathermy, although the clamp and cautery as suggested by Ferrier or the clamp and acid nitrate of mercury used by Crenshaw have given excellent results in their hands. If the base is not destroyed caruncles usually return.

One of my patients, 67 years of age, complained of painful and frequent urination of over twenty years' duration. She was extremely nervous, weak

and somewhat emaciated. Examination revealed three exquisitely sensitive urethral caruncles at the lower margin of the meatus. Her urinary symptoms disappeared and the others showed marked improvement following fulguration of these growths.

CARCINOMA OF THE FEMALE URETHRA

Although uncommon, primary carcinoma of the female urethra occurs occasionally; usually in patients over 40 years of age.

Chronic inflammation of the mucosa at the meatus or in the canal is believed to be an important etiologic factor. The most prominent symptoms of carcinoma are bleeding from the urethra and burning during urination. Difficulty in urination, pain and frequent urination are occasionally present. Examination reveals either a papillomatous growth at the external orifice or an irregular mass along the urethral wall which may or may not be ulcerated.

If treatment is begun early the prognosis is not hopeless. Partial or total excision of the urethra has been advised, but with a carcinoma so far advanced as to require such a radical operation as total excision the prognosis is so unfavorable that it is a question if such a procedure is justifiable. Diathermy, radium, or both are probably preferable.

Corbus and O'Connor⁸ have reported some good results from diathermy. I have seen two patients who had been treated with radium. One was alive one year, and the other five years after treatment without evidence of recurrence. The last patient, a widow 35 years of age, seen on March 7, 1921, complained of burning during urination and an aching sensation at the external urethral meatus of one week's duration. She had lost fifteen pounds during the preceding year. Examination revealed an ulcer involving the lower half of the external urethral meatus and an injected area extending backward along the floor of the urethra for about 2 cm. On March 8 she received 0.6 of neoarsphenamine and three days later 0.9. Examination on March 14 showed a slight increase in the size of the growth. As stated above she was in good health in March, 1926, five years after treatment with radium.

CALCULUS

Stones are rarely found in the female urethra because of the shortness of the canal, its lesser curvature and its greater distensibility. Although occasionally originating in the urethra, the majority have descended from the upper urinary tract and become lodged behind a stricture either at the external meatus or in the lumen of the canal or in a diverticulum.

The most common symptoms are frequent and painful urination, a constant desire to urinate, and a purulent discharge from the urethra.

If not seen on separation of the lips of the external meatus, calculi can be detected by inserting a metal instrument, such as an olive-tipped bougie or dilator into the urethra, by vaginal palpation or by a combination of these procedures. If it is impossible by means of a finger in the vagina to express

a calculus the stone may sometimes be grasped with forceps and removed following dilatation of the urethra. During instrumentation pressure with the vaginal finger behind the stone will steady it and prevent it from slipping back into the bladder. If too much force is required, however, an attempt should be made to push it back into the bladder where it may be crushed with a lithrotrite. If the calculus is lodged in a diverticulum it should be removed through a vaginal incision, the walls of the diverticulum being excised at the same time. Traumatism of the urethra, especially in the presence of an infected urine, is to be avoided.

A woman 50 years of age entered the Stanford Women's Clinic complaining of occasional attacks of painful urination. On vaginal palpation a hard mass was detected in the urethra just anterior to the bladder sphincter. Urethroscopy revealed a large calculus about 3 cm. from the external meatus. On attempting to remove the stone with urethral forceps it was broken into a number of fragments. Some bleeding followed this procedure. One week later the patient was free from symptoms and urethroscopy was negative. No calculi were found on radiography of the upper urinary tract.

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DISCUSSION

NATHAN G. HALE, M. D. (Capital National Bank Building, Sacramento)—A word of warning about overlooking the urethra is appropriate at this time, as Doctor Stevens ably points out to the urologists, and should also be seriously considered by the general practitioner. Urologists with experience are prone to examine this structure in a rather casual way, having their attention focused on abnormalities of the upper urinary tract.

The two-glass test is a valuable adjunct to the examination of the female urinary tract, and is not used as frequently as it should be. It is a variation of the usual technique in examining the female patient by most physicians.

Water irrigating cystourethroscope, for examining the urethra for pedunculated growths, is of utmost importance, as it brings into the field these papillary growths that the straight Kelly scope leaves flattened on the surface of the urethra and, therefore, often overlooked.

Cocain, 10 per cent strength, for a local anesthetic of the urethra, I am not familiar with, having been warned of its toxicity by experience of others. However, on a cotton-tip applicator—that has been saturated with the solution there is probably less danger, but the use of a cocain solution in the urethra of any strength has always made me very apprehensive.

The paper is very timely, and it brings to my mind the old adage, not to put the cart before the horse, as we are very often prone to think of the kidneys first and the urethra last.

P. N. JACOBSON, M. D. (Medical Building, Oakland, California)—It will be seen from the study of Doctor

Stevens' 234 consecutive female patients complaining of various urinary disturbances that the lesions encountered in this series were: urethral stricture, 121, or 51.2 per cent, and urethritis, 68, or 29 per cent. Bearing in mind that the two lesions are commonly associated, we have then, of the total number of cases studied, approximately 80 per cent of these two conditions alone.

If Stevens had gone no further in his article than to emphasize the importance of urethral stricture in women as a disease entity his efforts would have been worth while; but he has considered in this contribution the various lesions of the female urethra in such a thorough manner that the article merits the serious consideration of the urologist and the general practitioner alike.

Urethral stricture is one of the most common as well as one of the simplest lesions to recognize of any of the disturbances occurring in this organ. I have seen instances in my own experience where patients have had symptoms of dysuria and frequency extending over a period of twenty years relieved by a single treatment. Further, I have seen patients subjected to bladder irrigations for a period of years, meanwhile the diagnosis being cystitis, with absolutely no relief of symptoms. Dilatation of the urethra as outlined in this article is the essential part of the treatment.

Trigonitis and urethrotigonitis is a condition observed in women that, while causing much suffering and misery, has apparently not received the attention it deserves. These inveterate sufferers may go on over a period of years complaining of undue frequency and urgency, never having had a urethroscopic examination, which offers the only means for positive determination of most of the lesions and diseases of the urethra.

An acute inflammation of the urethra is often accompanied with involvement of the contiguous bladder mucosa (cystourethritis, trigonitis, cervicourethritis), is a common condition, the etiology of which is obscure. Among the laity this condition is commonly known as "cold in the bladder." Exposure to cold, errors in diet, highly acid urine, alcoholic excesses may be the etiological factors in the production of this train of symptoms. In these cases the colon bacillus is most commonly found in the urine and in pus obtained from the urethra; and in many cases a history of intestinal disturbance preceding or coincident with the urethral and vesical symptoms is elicited. Staphylococci and streptococci occur in this form of urethritis. Hunner has called attention to the striking frequency of this urethral and vesical condition in association with tonsillitis, grippe, and pharyngeal infections.

The importance of microscopic examination in differentiating the type of urethral infections cannot be overestimated. No case of acute urethritis should be called gonorrheal until positive and authoritative demonstration of the gonococcus has been demonstrated in the exudate.

I have nothing to add to the method of obtaining these specimens for microscopic study other than the method outlined in this article. Doctor Stevens has given us an excellent description of the technique of the examination of the female urethra. The symptomatology, diagnosis, and treatment of the various lesions described in this excellent paper deserves no further comment.

ANDERS PETERSON, M. D. (1136 West Sixth Street, Los Angeles)—I have read Doctor Stevens' paper with much interest and am left most strongly with the impression that I have not examined the female urethra with due care. Many women patients have undoubtedly been classified as neurasthenics following negative cystoscopic findings who were suffering from some lesion in the urethra. Particularly am I impressed with the large number of strictures reported, and I think that the reason for overlooking this condition is due to the fact that women rarely complain of urinary difficulty, but rather of painful urination.

In my own experience I recall many instances of difficulty in introducing the ordinary size cystoscope where it has been necessary to dilate the urethra with a sound of suitable size before cystoscopy could be carried out. In some of these patients no pathological conditions were

found in the bladder or kidneys, but the patients experienced almost immediate relief from their bladder irritation following such examination. Ordinarily I have not considered these cases as organic strictures, but rather thought them to be abnormally small urethras. Considering Stevens' findings and reports, these cases are undoubtedly organic contractions following either infections or trauma.

I feel both complimented and benefited in having this opportunity of reviewing this very complete essay.

HERBERT AUGUSTUS ROSENKRANZ, M.D. (W. P. Story Building, Los Angeles)—I have been much impressed with the system and completeness of Doctor Stevens' paper, which bears evidence of many revisions. One might compare it in this respect with the shorter stories of Balzac which, through their masterful technique, betray the many revisions and hard work that preceded the boiled-down, finished classic.

This paper is particularly timely, since we as urologists are too prone to concentrate on searching the kidneys and their immediate adnexae for abnormalities to the exclusion of the urethra in the female, although all of us learned early in our careers the folly of doing a male cystoscopy without having at hand also the complete urethroscopic armamentarium. The female urethra has been neglected urethroscopically and urethrometrically. Some practitioners for many years routinely dilated the female urethra for symptoms of irritable bladder. They did so empirically and not so infrequently got favorable results, little realizing that they were dilating an organic stricture.

Along this line it should be borne in mind that pain in the urethra, but with negative vulval, urethral and routine cystoscopic findings, is sometimes found on more thorough examination to be a referred pain caused by ureteral stricture. I appreciate the thoroughness of Stevens' paper all the more because some months ago I reviewed pretty thoroughly the available literature on the urethra in order to benefit an elderly lady who had had a very extensive growth removed from the vulva and urethra four years previously. After a number of urethroscopies and cystoscopies I finally relieved her by dilating a left ureteral stricture which had been the cause of a very distressing pain referred to the urethra.

Along with the use of the acorn-tipped bougie I have found palpation of the urethra with the finger to be of distinct value in the diagnosis of localized hard strictures and also of the fairly common chronic urethritis mentioned by Stevens, in which the whole urethral tube is uniformly and markedly thickened and increased in density.

I would like to call attention to a very much neglected but very effective treatment of chronic trigonitis and cystitis coli which conditions are occasionally complicated by a sensitive inflammatory condition of the urethra near the bladder neck. This condition is most frequently caused by a colon bacillus infection either ascending or descending. In my cases I have found it to be more frequently descending. It does not respond to bladder irrigation, although millions of bladder irrigations have been wasted upon these patients. The treatment was devised by Bierhoff while working in Knorr's Clinic in Berlin, and is called "Knorr's cauterization." A urethroscope is introduced into the bladder, thus emptying the bladder. A large cotton swab dipped in one-half of one per cent silver nitrate is introduced into the bladder, the urethroscope withdrawn, and the swab withdrawn after it. This procedure admits of a thorough application of the medicine to the diseased urethra as well as the bladder neck. The treatments should take place about every four days, increasing the strength of the silver nitrate one-half per cent each time up to tolerance, and according to result. The treatment may be somewhat painful, and I agree with Stevens, who remarks, "It is advisable to avoid severe pain following treatments." These patients should be given a hypodermic of some analgesic some minutes before the treatment. Neosilvol or argyrol should also be instilled into the bladder following the treatment on account of their soothing effect.

THE INSULIN TREATMENT OF DIABETIC COMA

By WILLIAM H. LEAKE*

(From the Medical Service of the Los Angeles General Hospital)

SINCE the introduction of insulin recoveries from uncomplicated diabetic coma are so frequent that it is not regarded with sufficient concern by some physicians who fail to realize that even with insulin, coma patients recover only as the result of long hours of hard work by the doctors and nurses.

This paper is based on fifty-three cases of diabetic coma treated with insulin at the Los Angeles General Hospital between January 1, 1923, and January 1, 1926. All but seven of the patients were in deep coma on admission or developed it after entering. The seven exceptions were so stuporous that I have classified them simply as coma patients. Joslin's¹ thirty-three patients treated with insulin with two deaths were largely those in impending coma.

The onset of coma may be sudden, but this is unusual except in severe diabetics receiving large amounts of insulin who are deprived of their supply. Patients who develop coma while taking insulin are extremely resistant to treatment. Nausea, vomiting, epigastric pain, restlessness, drowsiness, weakness, air hunger, and headache are the usual danger signals indicating approaching coma. Abdominal pain, nausea and vomiting are frequently met with in children and at times are mistaken for symptoms of an acute surgical condition, as fever and leukocytosis may be present. Wild delirium is occasionally the first symptom of impending coma. Air hunger, hyperpnea or Kussmaul respiration is practically always present in diabetic coma as a very characteristic symptom. A most important sign in the differential diagnosis of diabetic coma is the soft eyeball, first described by Krause in 1904 and more fully by Riesman² in 1916. Krause observed it in twenty-two patients with diabetic coma, but failed to find it in coma from other causes. I have observed it repeatedly in diabetic coma; in several instances the intraocular tension could not be obtained with the tonometer. The cause of this phenomenon is not known.

As the onset of coma is often insidious every diabetic should be warned to communicate immediately with his doctor if any unusual symptoms appear.

Treatment—In October, 1923, the following rules for the treatment of diabetic coma were prepared by Dr. Phoebus Berman, medical director of the Los Angeles General Hospital, and, with certain minor modifications, are still in use:

1. Catheterize the patient and examine the urine immediately upon admission.

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2. Warmth is essential; keep the patient warm with hot blankets and hot water bottles.

3. Empty the lower bowel with a warm soapsuds enema; repeat if necessary; avoid cathartics.

4. Force fluids up to 4000 cc. during each twenty-four hours. If the patient is unable to swallow, administer 1000 cc. normal saline by hyperdermoclysis every six hours (at the present time we often give 5 per cent glucose solution with insulin by this route). Proctoclysis of normal saline or of glucose and soda may be given freely.

5. Administer one unit of insulin per pound of body weight; one-half of the amount is given intravenously, one-half subcutaneously. In patients who are not in deep coma the report of the initial blood chemistry should be obtained before the second half of the insulin is given. If the second blood examination (four hours after the initial dose of insulin) shows that the blood sugar has not changed or has increased, another subcutaneous injection of insulin should be given (one-half the initial dose). The blood sugar and plasma carbon dioxide combining power are determined every four hours. The degree of acidosis, the patient's general condition and the duration of the coma should be taken into consideration in giving additional insulin. Ordinarily the amount of insulin administered up to this time ($1\frac{1}{2}$ units per pound of body weight) is sufficient for the first twenty-four hours.

6. Administer approximately one gram of glucose per kilogram of body weight during the first twenty-four hours. If possible, give by mouth in the form of orange juice, which contains 10 per cent carbohydrate. If the patient is unable to swallow, a proctoclysis of 5 per cent glucose should be given (we are now using 5 per cent glucose solution containing insulin by hypodermoclysis). When a large amount of insulin is used it is thought safer to give more glucose than the amount suggested above, but it should be remembered that in ordinary cases of diabetic coma large quantities of insulin are tolerated without marked reduction in the blood sugar.

7. If the patient remains in coma at the end of twenty-four hours following the first administration of insulin, and the blood sugar is still high, the original dose of insulin may be repeated, dividing it into two or three injections during the next twenty-four hours. The blood sugar should be determined every four hours and symptoms of hypoglycemia should be looked for at this time.

8. As children appear to be more susceptible to insulin, give smaller doses. A relatively small amount occasionally produces a marked reduction in the blood sugar.

9. Many coma patients will continue to be sleepy and drowsy for several days after the acidosis has disappeared and after the blood sugar has been reduced. Insulin should be given to these patients with caution as a hypoglycemic state may be brought about easily.

10. Nourishment to the comatose patient is supplied in the form of orange juice. As soon as the individual is able to take food by mouth a balanced diet of approximately 1000 calories per twenty-four hours is furnished. The diet should be of small bulk, consisting mainly of milk, cream, cereal, butter, and orange juice.

Some of the first coma patients in this series were given large quantities of sodium bicarbonate by mouth and by rectum, but now we are content with the administration of not more than 15 to 25 gm. of sodium bicarbonate during the first twenty-four hours. This is the dosage suggested by Starr and Fitz,³ who have shown that in certain patients with diabetic coma the acidosis may be due to organic acids other than the ketone group which do not respond to insulin but disappear under alkali therapy.

During the past year and a half at the Los Angeles General Hospital insulin has been administered by the subcutaneous route, except in the most severe cases where the initial dose was given intravenously.

Recent literature indicates that the majority of investigators are in favor of fairly large doses of insulin. Joslin,⁴ in 1923, advised against more than ten units of insulin as an initial dose in coma cases, but more recently⁵ he advocates larger amounts. He states that, "We never intend that a patient at the New England Deaconess Hospital shall come up to within two hours of death from coma without having received at least 150 units of insulin in the preceding hour." I have given in several instances 100 units as the initial dose. In order to prevent any untoward effects from such large amounts it is the custom at the Los Angeles General Hospital to use approximately 1 gram of glucose to buffer each unit of insulin. Campbell and Macleod⁶ are of the opinion that carbohydrate thus administered is more efficient as an antiketogenic agent than glucose derived from glycogen in the tissues and from the protein breakdown. The glucose is given for this purpose as well as to prevent possible hypoglycemia.

Of my 53 patients 29 were males, 24 females. The youngest patient was $2\frac{1}{2}$ years, the oldest 67 years. Table I shows the age incidence by decades. Twenty-eight patients were in deep coma on admission and 18 developed coma after entrance to the hospital. There were seven "borderline" cases, so called because these patients were in an advanced state of acidosis and were extremely drowsy. The patients manifesting signs of severe acidosis, moderate air hunger and drowsiness, but who could answer questions are not included in this discussion.

Thirty-seven (69.8 per cent) of the 53 patients died, 16 (30.2 per cent) recovered. Seven patients who entered the hospital in deep coma regained consciousness but died of other complications. The cause of death in the majority appeared to be sudden heart failure. The seven patients termed "borderline" recovered. Eight patients died within twelve hours after admission. Twenty of the 37 patients who died had grave complications, which were discovered at the time of examination or at necropsy (Table II).

The highest blood sugar noted was 625 mg. per 100 cc. of blood, the lowest 181 mg. Two patients had extremely low plasma carbon dioxide combining power—9.9 volumes per cent; one recovered.

One patient was admitted on three separate occasions in coma, recovery ensuing each time; another was admitted twice in coma, recovering each time, and one, a child of $2\frac{1}{2}$ years, died a few hours after his second admission for diabetic coma.

Of the eleven patients who had been under insulin treatment prior to the onset of coma only five recovered, thus confirming the statement made above that severe diabetics who are deprived of their insulin may go into coma very rapidly and that they are singularly resistant to subsequent insulin therapy. The smallest quantity of insulin required to restore a patient to consciousness was 15 units in a child $2\frac{1}{2}$ years of age. Many of the patients who received large doses of insulin remained stuporous for several days, although the acidosis disappeared within a few hours. In the first few patients insulin was administered with undue caution. It is now a well-known fact that so long as the insulin is buffered with sufficient carbohydrate unlimited quantities may be given. I have found it unnecessary to administer

more than 200 units to the average coma patient during the first twenty-four hours, but I would not hesitate to give five times that amount if indicated.

In many diabetics receiving large doses of insulin the blood sugar tends to remain at a high level although the urine is sugar free. Attempts to lower the blood sugar by increasing the dose of insulin may be followed by a moderate reaction, although the blood sugar does not fall below 100 mg. per 100 cc. of blood. Campbell and Macleod⁶ suggest that these reactions may be explained on the basis of protein sensitization, but this is not certain. They suggest also that the speed of change of the blood sugar level may be in some way the responsible factor. Major and Davis⁷ have noted these reactions in patients with high blood sugar levels. Guthrie⁸ in a recent communication states that these reactions may be overcome and a lower level maintained by re-education of the patient or "cell training." Many of my patients who have been receiving insulin for some time show this high blood sugar level with no glycosuria; all efforts to reduce the blood sugar by increasing the insulin have met with failure because of the reactions which developed.

Lack of space will not permit detailed case reports or graphic charts. Tables III, IV, V, VI, and VII show the laboratory data of five patients of this series. Patient No. 192-960 was discharged on a diet of P. 50, C. 70 and F. 205, with *no insulin*, the only patient of those recovering in whom it was found possible to discontinue insulin. Patient No. 201-942, discharged February 2, 1923, receiving 30 units of insulin daily and with a blood sugar of 181 mg. is at the present time receiving 92 units of insulin a day, the blood sugar ranges between 222 mg. and 285 mg. and the urine is sugar free. This patient is unable to tolerate 95 units of insulin without showing a reaction.

SUMMARY AND CONCLUSIONS

1. Fifty-three patients with diabetic coma are reported. The high mortality of this series is explained partially by the large number of grave complications, the long duration of the coma in many, and the failure of several patients to receive treatment for diabetes before coma developed.

2. The symptoms of approaching diabetic coma are often misleading. Diabetics should be warned to communicate immediately with their physician upon the appearance of any unexplained symptom. Abdominal pain, nausea, vomiting, fever and leukocytosis, especially in children, may lead to the diagnosis of an acute abdominal condition.

3. Decreased intraocular tension is a very important sign in the diagnosis of diabetic coma. It is practically always present.

4. In addition to the liberal use of insulin, buffered with carbohydrate, the treatment of diabetic coma consists mainly in forcing fluids, warmth, elimination, and stimulation with caffeine sodium benzoate and digitalis. Not more than 25 gm. of sodium bicarbonate should be administered daily.

5. Diabetics develop coma rapidly when deprived of insulin. Coma in these individuals is apparently

more resistant to insulin therapy than in patients who have not received insulin previously.

6. Insulin is not infallible. Coma patients recover only as the result of strenuous hours of hard work by the doctors and nurses in attendance.

7. Insulin is an extremely potent drug. In the hands of those familiar with its action it often saves lives, but if used carelessly the results may prove disastrous.

TABLE I

Age incidence by decades: 1st decade 4; 2nd decade 6; 3rd decade 9; 4th decade 11; 5th decade 11; 6th decade 7; 7th decade 5.

TABLE II

Complications in the fatal cases: bronchopneumonia 3; carbuncle 2; pulmonary edema 2; septicemia 1; gangrene (amputation) 1; ruptured pyosalpinx—general peritonitis 1; ethmoidal sinusitis with brain involvement 1; cardiac decompensation 1; multiple abscesses of arms (probable septicemia) 1; intestinal obstruction 1; auricular fibrillation 1; miliary abscesses of left kidney 1; bronchopneumonia—empyema 1; bilateral hydronephrosis and hydro-ureter 1; gangrene and pneumonia 1; and pulmonary tuberculosis 1.

TABLE III

Date	No. 192-270. Age, 2½ years Days in Coma	Urine Sugar %	Blood Sugar Mg.	Insulin Units
July, 1923				
3	3	1	625	15
4		0	377	7
5		0	400	7
6		0	333	9
7		0	333	9
8		1		14
9		0.5	333	15
12		0		16
15		0	250	16
19		0	200	16
23		0	166	16

TABLE IV

Date	Acetone	Urine Sugar %	Blood CO ₂ Vol. %	Blood Sugar Mg.	Insulin Units
May, 1923					
28	0	2.5		400	0
Patient in hospital on a diet preparatory to perineorrhaphy					
Nov., 1923					
10	1+	trace	61	200	35
11, day after operation					
	4+	present	57		60
	1+	0.5	—	—	85
12	0	0	86	117	125
14		0	84	142	35

This patient died of pneumonia. She became comatose shortly after operation, but responded readily to insulin. She received no insulin prior to the perineorrhaphy. Coma developed again a few hours before death, but there was no evidence of acidosis at this time.

TABLE V

Date	No. 192-384. Age, 22 years Urine Sugar %	Blood Sugar Mg.	Insulin Units
July, 1923			
5	Semi-comatose on admission. Patient went completely into coma twelve hours later.		
6	3.3	363	150
7		347	80
8		333	80
9		285	80
14		400	80
17		142	80

Patient discharged July 26, 1923. Diet P. 45, C. 65, F. 152. Insulin, 80 units daily.

TABLE VI

No. 192-960. Age, 33 years					
Date	Time in Coma	Acetone	Urine Sugar %	Blood Sugar	Insulin Units
July, 1923,					
18	6 hrs.	2+	2.5	400	80
19		1+	2.5	400	80
20		0	2.0	500	140
23					
30		0	1.0	333	50
August 6		0	0	182	10
23		0	0	118	0

Discharged August 23, 1923. No insulin. Diet P. 50, C. 70, F. 205. This is the only patient in the series in whom insulin was discontinued.

TABLE VII

No. 201-942. Age, 22 years					
Date	Acetone	Urine Sugar %	Blood CO ₂ Vol. %	Blood Sugar	Insulin Units
January, 1924					
11	3+	3.3	10	400	150
12	3+	0	29.6	400	85
14		0.95	39.5	307	60
15		0.8	40.4	285	30
16		1.3	30.9	250	30
17		0.6	42.4	285	30
18		0.5	40.4	285	30
19		0.6	40.4	285	36
21		0.4	48.1	285	36
22		0.2	50.0	222	36
23	1+	0.4	50.0	222	45
24	0	0.08	50.0	200	45
28	0	0.09	—	181	36
Feb. 1	0	0.08	—	181	30

Discharged February 2, 1923. This patient has been under observation in the diabetic clinic during the past three years. He remains sugar free with a blood sugar of 250 mg. He receives 92 units of insulin daily. Any attempt to lower the blood sugar by increasing the insulin produces severe reactions.

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Large scale production, far-flung advertising, and the widespread distribution of goods and ideas have drained something of the color and flavor from American life. Men no longer react individually to conditions as they did in the isolation of the farm or the mine but respond to them under full cognizance of what their fellows are believing and feeling. They think alike, act alike, desire alike. It is a truism that deviation from the usual is nowhere more frowned down upon than in democratic America. Conformity is the price of respectability, and eccentricity is the deadly sin. As nowhere else in the world fashions and fads tyrannize in America.—*Saturday Review of Literature*.

Under the new Medical Practice Act of New York, podiatrists are forbidden to call themselves doctors, even though they follow this designation with the qualifying term of their craft. It is also prohibited to any but licensed physicians to use the expressions "foot specialist," "surgeon," "pedic surgeon," "orthopedic surgeon," or "orthopedic specialist."

PERFORATED ULCERS OF THE DUODENUM

TREATMENT BY HORSLEY OR MAYO PYLOROPLASTY

By EDMUND BUTLER* AND EVERETT CARLSEN

Simple closure is the rational procedure in perforations of acute duodenal ulcers. Such ulcers have existed only a very short time, and the patient often does not give a history of distress previous to perforation. Possibly about 20 per cent of perforated duodenal ulcers come under this classification.

Obstruction seldom follows closure of a perforated duodenal ulcer, therefore it is unnecessary to do a gastroenterostomy because of the fear of this complication.

The surgeon that occasionally encounters a perforated ulcer should be satisfied to do a simple closure.

Perforation of a chronic duodenal ulcer, if seen early, should be treated the same as perforating ulcers. If the induration is great and the patient's condition good a gastroenterostomy is advisable. If there is slight induration and the gastric wall in the region of the pylorus and the antrum is not too much indurated or thickened, then a pyloroplasty is indicated.

DISCUSSION BY R. W. Wilcox, Long Beach; Clinton D. Collins, Fresno; John Homer Woolsey, San Francisco.

PATIENTS suffering from perforated duodenal ulcers present themselves for treatment in three stages. First the stage of contamination, secondly the stage of peritoneal reaction, and thirdly the stage of progressive peritonitis. During the stage of contamination continuous severe pain in the epigastrium and a board-like rigidity make a diagnosis of perforated ulcer most likely. During the stage of reaction the pain becomes less severe and the rigidity, although present, is less marked, the patient believes himself to be improving, thus the correct diagnosis may not be suspected and the decision to wait a few hours is frequently made. During the stage of progressive peritonitis it is difficult without a most carefully taken history to make a correct diagnosis. The diagnoses of cholecystitis, pancreatitis, diverticulitis, appendicitis, pyelitis and, in the female, pelvic inflammation must be ruled out.

The operative procedures depend on the stage in which the patient first comes for treatment. In the stage of contamination our procedure should be the same as though we were dealing with a perforating ulcer. The presence of a perforation within the first three or four hours should not deter the surgeon from doing a pyloroplasty or a gastroenterostomy. In the stage of reaction the operative procedure must be limited and simple closures and possibly pyloroplasty may be considered, most assuredly not a gastroenterostomy. During the stage of progressive peritonitis simple closure of the perforation is all that reasonably should be done, with pelvic drainage added in the latter stages. Drainage is not used in the stage of contamination or reaction, or in the early stages of peritonitis. Flushing of the peritoneal space should not be attempted.

The advice of some of our leading surgeons is confusing to one not sufficiently acquainted with this type of pathology to have developed considerable individual judgment. Guthrie summarized answers to questionnaires on the subject of perforation of duo-

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denal ulcers of 150 surgeons. Gastroenterostomy was done routinely by twenty-two, by sixty-four never, and in sixty-two a shifting percentage depending upon the condition of the patient, size and induration of the ulcer and the degree of stenosis. Deaver performs gastroenterostomy in every case. Richter is of the opinion that the perforation if properly closed would cause obstruction and therefore require gastroenterostomy. Gibson reports results not so good after gastroenterostomy as without it, and actual obstruction rarely occurs. Pool holds that routine gastroenterostomy is not advocated because with the average surgeon it increases the immediate risk. The mortality rate is little affected by gastroenterostomy, according to Hunt. K. Patterson Brown believes that gastroenterostomy gives a larger percentage of cures than does simple closure. Mills of England advocates routine gastroenterostomy. Wilensky is of the opinion that the most rational procedure in the presence of an acute perforation is to simply close the perforation. Stillman, my former chief, advocates simple closure and later a secondary gastroenterostomy may be necessary in a very low percentage of cases. Weeks, former chief of the San Francisco Hospital Service, is an advocate of simple closure, except when the ulcer is very near the pylorus and the closure is likely to produce obstruction, then a gastroenterostomy should be done.

Since December, 1919, sixty-eight patients suffering from perforated gastric or perforated duodenal ulcers have been operated upon in the Emergency Hospital Service. Of this series twenty-one have been simply closed. In thirty-seven gastroenterostomy was performed. In a recent series of ten perforated duodenal ulcers, Horsley-Mayo pyloroplasties have been performed. In the series of gastroenterostomies three patients were lost. In the series of simple closures seven patients were lost. Most of the patients that were lost following simple closure came in late and progressive peritonitis was well advanced.

At present we believe that pyloroplasty has a limited application, but we are not thoroughly convinced that the after results are any better following pyloroplasty than those that follow simple closure. In a subsequent paper we hope to be able to give data that will be more conclusive. Two patients of this series of pyloroplasties died, one had a sickle cell anemia, which has been previously reported by Gordon Hein of the San Francisco Hospital; the other developed a bronchial pneumonia the fourth day and died on the seventh day. No evidences of complications from the perforated ulcer were manifested.

The technique of the pyloroplasty is precisely that described by Horsley and by Mayo. Remember the structures are indurated and the procedure is more difficult, as the sutures will cut if too much tension is applied. The stomach must be pulled or shoved over to the duodenum as the temporary inflammatory induration fixes the duodenum. Incision must not extend the full two inches on the gastric side, as the opening of three or three and one-half inches in length would be most difficult to close transversely in the presence of the induration.

DISCUSSION

R. W. WILCOX, M.D. (114 East Seventh Street, Long Beach, California)—The most impressive factor of the treatise by Doctor Butler and Doctor Carlsen is the fact that perforations of the duodenum cannot be considered as a single entity with a routine operative repair for all cases. The individual, the age, the physical condition, the chronicity of the ulcer, and the time elapsing between the perforation and the time of repair, are factors that markedly alter the pathological picture.

The pathology found at operation determines the procedure that should be followed so as to give the patient first and above all else the best possible chance for recovery, and, second, the best possible functional result. The functional result may not be satisfactory; however, it is possible to correct this by further surgical procedure providing the patient is alive. The surgical judgment governed by the desire of the surgeon for the recovery of the patient, based on thorough pathological knowledge, will determine in each case the surgical procedure.

Artistic operations well performed are of no value if the patient does not recover.

Butler and Carlsen's classification of the stages of peritoneal involvement as a determining factor in the extent of surgical procedure is very good and gives the patient a maximum chance for recovery. The classification makes it axiomatic that the extent of surgical procedure decreases as the peritoneal invasion increases.

Simple closure of a perforation in a certain number of cases would give a lower mortality rate than a series of cases in equal number where more extensive operations were performed.

Secondary operations in a small percentage of cases following simple closure would be necessary, resulting, I believe, in a more satisfactory functional result than the result following immediate pyloroplasty or gastroenterostomy where the extent of pathology markedly handicaps the surgeon.

I have very much enjoyed the privilege of commenting on this excellent paper.

CLINTON D. COLLINS, M.D. (Mattei Building, Fresno, California)—The subject of treatment of perforation of gastric and duodenal ulcers has been well covered in this paper. The authors have given us a good working classification.

Most surgeons will agree, I believe, that in those patients who have reached the stage of progressive peritonitis, no more than a simple closure of the ulcer with or without drainage should be done. Even in the advanced cases, however, it may be necessary to excise the base of the ulcer before a satisfactory closure can be made. This is particularly true of indurated ulcers of the stomach.

In the earlier stages there is ground for difference of opinion. A factor which will often influence the extent of the operation and one which the authors have not emphasized is that of shock, which usually follows perforation of the stomach or bowel.

We often see patients in the earlier stages following perforation who are profoundly shocked. Unnecessary surgery should not be attempted under such circumstances. In these cases we are not dealing with ulcers of the stomach or duodenum per se, but with complications arising as the result of the perforation of the ulcer. Our efforts under these conditions should be directed, not so much toward curing the ulcer, but to carrying our patients safely through the immediate emergency. Experience has taught us that this end can be best accomplished by simple closure of the perforation, leaving more drastic curative measures to some future and more suitable time.

JOHN HOMER WOOLSEY, M.D. (490 Post Street, San Francisco)—The three stages of perforating duodenal and gastric ulcers are well chosen and defined. Agreement is also unanimously given to the authors' general outlined plan of treatment for each stage with the exception of the use of a pyloroplasty.

The advisability of a pyloroplasty, which obviously will be performed only in the first stage or period of contamination, is contrary to the experience at the University of California clinic. The first qualification for a

pyloroplasty is a freely movable, or, secondly, a mobilized duodenum. This prerequisite is as a rule not present in a chronic perforating duodenal ulcer, rarely present in an acute perforating duodenal ulcer, and a pyloroplasty never would be employed for a perforating gastric ulcer of the lesser curvature of the stomach. Mobilization by a lateral linear incision of the posterior peritoneum would be unwise in the presence of possible infection. Pyloroplasties performed where the duodenum is not freely mobile or where, as Butler and Carlsen say, "the stomach must be pulled or shoved over to the duodenum" do not give a good functional result and the majority have to come to further surgery.

It is recommended therefore that in the stage of contamination, simple closure of the perforating duodenal and gastric (pyloric antral) ulcer, with gastrojejunostomy only where obstruction is likely to ensue, and simple closure of the gastric ulcer of the lesser curvature with excision at times if possible but always accompanied by gastrojejunostomy, be performed.

CONTROL OF URINARY HEMORRHAGE

By PAUL A. FERRIER *

DISCUSSION by James R. Dillon, San Francisco; Franklin Farman, Los Angeles.

WHILE the control of urinary hemorrhage is often simple, there are instances which tax the resources of the most skillful surgeon. It is proposed to consider these resources.

Successful treatment of hemorrhage includes the removal of the underlying pathological conditions. To recall the etiology, I have tabulated from MacKenzie, Kretschmer and Chute 1679 cases of hematuria, with their causes, in order of frequency.

CAUSES OF HEMATURIA.....	Cases	Per Cent
KIDNEY	1679	
Pyelitis or pyelonephritis.....	712	42.4
Tuberculosis	217	12.3
Stone	180	10.7
Nephritis	145	8.6
Malignancy	56	3.3
Hydronephrosis	54	3.2
Trauma	20	1.1
Polycystic kidney	12	.71
Congenital anomaly	11	.66
Pyonephrosis	11	.66
Syphilis	4	.23
Infarct	2	.11
Movable kidney	2	.11
Echinococcus	1	.05
BLADDER	1	.05
Tumor	527	31.3
Stone	358	21.3
Chronic cystitis (simple).....	72	4.2
Tuberculosis	49	2.8
Hunner ulcer	14	.73
Diverticulum	9	.53
Trauma	8	.47
Polypi	7	.41
Cord bladder	3	.17
Fistula	2	.11
Cystitis cystica	2	.11
Angioma	1	.05
Ruptured artery	1	.05
PROSTATE	1	.05
Hypertrophy	225	13.4
Cancer	135	7.7
Inflammation	61	3.6
Tuberculosis	13	.77
Stone	10	.58
Foreign body	4	.23
	2	.11

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	Cases	Per Cent
URETER	151	8.8
Stone	142	8.4
Stricture	6	.35
Atony	2	.11
Cancer	1	.05
URETHRA	64	3.8
Urethritis	26	1.5
Trauma	13	.77
Stricture	12	.71
Caruncle	10	.58
Prolapse	2	.11
Polypi	1	.05

This list while not complete is representative. Essential renal hematuria of varied etiology is not tabulated, but is an important problem because of its differential diagnosis by exclusion, and its demand for control of bleeding.

In every hematuria diagnosis comes first. The initial bleeding is never fatal. Every day patients lost because the easy-going physician tides over a hemorrhage from tumor or tuberculosis while the opportunity for cure slips. Caspar states that in only three of 142 cases of bladder tumor seen soon after the first bleeding was the tumor large. By all means, diagnosis comes first. But help is often needed preliminary to radical treatment, and it is not always possible to remove the pathological lesions. Therefore, palliative hemostasis is important.

General as well as local causes must be considered. Clotting power may be at fault. While the mechanism of clotting is not fully understood, it is recognized that the clot is built upon fibrin, which exists in the blood as fibrinogen. Fibrinogen is coagulated by a protein substance thrombin, capable of being isolated and combining with 215 times its weight of fibrinogen. Thrombin exists in the blood as prothrombin, which is activated by tissue and blood cell juices called thrombokinase in the presence of a sufficient concentration of a soluble salt of calcium. The blood is kept from clotting in the veins by an antagonist to the prothrombin.

Four deficiencies may exist: that of calcium; of prothrombin; of platelets; of tissue juices, so called thrombokinase. The calcium clotting time may be tested and if calcium is lacking as, for example, in chronic jaundice, the administration of 10 cc. of 10 per cent calcium chloride intravenously on three successive days restores clotting. The common practice of giving calcium lactate by mouth is ineffective because of small absorption. In hemophilia prothrombin is lacking. In purpura platelets are low. These may only be supplied by blood or tissue juice from another person.

Clotting may be raised above normal by increasing the thrombokinase locally or generally. Locally by squeezing out the patient's own tissue juices. For example, Freyer advises massaging the prostatic capsule after enucleation; by heat; by transplanting muscle tissue, or by application of cephalin, or thromboplastin. For general action these may be injected subcutaneously. They have largely superseded horse serum on account of the danger of anaphylaxis and serum sickness.

Neuhoff and Hirshfeld found that intramuscular injection of sodium citrate greatly hastened clotting in normal or abnormal blood, except in platelet deficiency. The effect lasts two to three hours. Fifteen

cc. of 30 per cent sterile sodium citrate solution is injected into the muscle of each buttock preceded by novocain. No harm was noted in two hundred cases, even in nephritis. I have found this useful in oozing hemorrhages.

Mills, of the University of Cincinnati, has purified a tissue extract, which he calls "tissue fibrinogen." It is a protein united with cephalin. Administered subcutaneously, or with ice water on an empty stomach; it diminishes the clotting time one-half in fifteen minutes, the effect lasting several hours. He claims an effect in all types of bleeding except (1) severe jaundice, (2) rapidly progressive secondary anemia, (3) purpura, (4) hemophilia, after the bleeding has continued two days. It has the disadvantage of being unstable.

Finally, for all serious hemorrhages the sheet anchor is blood transfusion, both to replace the loss, and to promote clotting. Whole blood versus citrated blood has been much discussed. To replace massive loss that is best which is quickest. The citrate method is easier, can be done by one person, and the blood can be transported. But it is generally agreed that fewer undesirable reactions follow whole blood; and with proper assistance it is the method of choice. The patient should be previously grouped with available donors. But it is a comfort to know that Birnes in recently reporting 1000 transfusions states that in 426 cases in which a Group IV donor was used for a patient in another group, the percentage of reactions was no higher than in a series in which donor and recipient were in the same group.

How to stop essential hematuria has long been a problem. The Johns Hopkins series reported by Levy indicates that nephrotomy is not justifiable, as the results are better with the injection of 5 per cent silver nitrate into the pelvis of the kidney. Connor at the Mayo Clinic has recently shown in twenty-two cases of essential hematuria a definite deficiency in blood platelets. Other cases were proved to be associated with purpura hemorrhagica. In one such case under my observation, long continued hematurias with general purpura ceased with the intravenous injection of mercurochrome.

In bleeding from pyelitis injection of silver nitrate solution up to 5 per cent is effective, if combined with elimination of focal infection and correction of faulty drainage.

In bleeding from the lower urinary tract, when the pathology cannot be removed, rest, general and local by indwelling catheter, continuous two-way irrigation with 1:15000 silver nitrate solution, fulguration or diathermy are available. In spite of its limitations in the cure of malignancy of the bladder and prostate, radium for the arrest of hemorrhage is invaluable. Deep x-ray therapy is also useful.

No attempt is being made to cover individual urologic operations, but the general principles of exposure, careful dissection under the eye, looking out for aberrant vessels, painstaking ligation, proper pedicle development, double clamping, individual ligation, are vital.

One operation will be mentioned because men have viewed with complacency a degree of hemorrhage which would not be tolerated in any

other operation: that is, prostatectomy. Thompson Walker states in 1920 that in the entire series of prostatectomies at Saint Peters Hospital, only two deaths were attributed to hemorrhage. But the following causes were invoked: shock, 10; syncope, 3; exhaustion, 7; cardiac, 9. He says, moreover, that one in every ten bleed seriously. Folsom collected 3588 prostatectomies with only four deaths from hemorrhage. He considers hemorrhage negligible. Hemorrhage is not pleasant to admit. He does not list the deaths from shock, exhaustion, syncope, cardiac failure, hypostatic pneumonia or the prolonged convalescence and permanent loss of vitality due to severe bleeding. But the use of wide-open exposure, ligation of bleeders in the prostatic capsule advocated by Thompson Walker, and the use of the Pilcher bag, Hunt has indeed made hemorrhage negligible in suprapubic prostatectomy.

Finally, the individual reaction of every bleeding patient to hemorrhage should be thoughtfully considered. One may bear with impunity what is disastrous to another. The blood pressure and heart bear careful watching. Stimulating a heart suffering for want of blood is unintelligent treatment. Replacing blood by salt solution is temporary respite. Transfusion, if needed, should be resorted to early, not merely to spare a hemorrhage death, but to avoid a prolonged dangerous convalescence with perhaps permanent deterioration.

DISCUSSION

JAMES R. DILLON, M.D. (490 Post Street, San Francisco)—Doctor Ferrier has ably presented the subject of hematuria, which should be regarded by the general profession as seriously as it is at present by the urologist. The importance of early diagnosis cannot be overemphasized, and it is inconceivable how a physician can temporize with a patient having repeated attacks of hematuria, some lasting several weeks or months, before seeking expert advice. Unfortunately patients frequently fall into the hands of unskillful cystoscopists, and are frightened from follow-up examinations, which are often necessary.

Hemorrhage following prostatectomies is often more serious than admitted, but if properly packed or held by the Pilcher or Davis bag, whether suprapubic or perineal, there will usually be no trouble. However, if bleeding again starts after removal of the bag or packing and does not quickly respond to the usual hemostatics before the pulse rate gets too high, we should not hesitate to do a cystotomy and repack or replace the bags, and push our hemostatics. As long as the pulse rate is carefully watched and kept under control there will be little use of the excuses of "shock, syncope, and exhaustion."

FRANKLIN FARMAN, M.D. (1401 South Hope Street, Los Angeles)—This essay by Doctor Ferrier upon an important urologic subject is of interest to all physicians. When speaking of control of hemorrhage, whether within the urinary tract or elsewhere, we naturally think of means to stop the bleeding. But to control hemorrhage, one must know first the cause and site of bleeding. The list as given by Ferrier, from the compilation of MacKenzie, Kretschmer and Chute, shows the multiplicity of disease entities which may produce hematuria. Every case of hematuria therefore should be subjected to an exhaustive urological investigation, if necessary to clear up the diagnosis.

The obscure case of hematuria is usually classified as "essential," but in many instances by more painstaking examination definite pathology will be found to account for the condition such as an epithelial tumor of the ureter or kidney pelvis, or a small papilloma of the posterior urethra. In women it is easy to overlook bleeding from an intraurethral caruncle.

Undiagnosed and neglected cases of hematuria may

lead to severe secondary anemia, so besides the primary pathology, we have a blood dyscrasia to combat.

Hematuria (gross or microscopic) may occur early in bladder tumor, and by immediate cystoscopic examination many more cases of cancer will be discovered early, thereby offering the patient a good chance for cure by surgery, the cautery, radium, or x-ray.

Bleeding from the bladder neck caused by acute congestion in hypertrophy of the prostate, though troublesome, rarely is serious and usually can be controlled by catheterization, relieving the pressure and washing out the blood clots. Should this fail, suprapubic cystotomy to control the immediate hemorrhage is indicated, which procedure also serves to drain the bladder in preparation for prostatectomy.

Hemorrhage following suprapubic prostatectomy no longer is a menacing complication providing these elderly patients are not rushed to operation without proper preliminary preparation, and providing the actual enucleation of the gland is carried out not as a blind "bloody" procedure, but as an open operation under visual control.

THE DIAGNOSIS OF GENITAL LESIONS

By H. J. TEMPLETON *

DISCUSSION by Ernest K. Stratton, San Francisco; H. P. Jacobson, Los Angeles.

THE correct early diagnosis of genital lesions is of paramount importance to the patient and the public. Most of the diseases attacking the genitalia are local in their action. The importance of their early recognition lies in differentiating them from the seemingly insignificant local lesion of that most generalized of all diseases, syphilis.

I make no apologies for writing on this subject which may seem hackneyed to some. My excuse can be found in the great number of patients with maltreated lesions on their genitals who daily come to the attention of physicians doing syphilology; patients who have been told that their sore is "nothing but a hair cut," a pimple, a cold sore, or a soft chancre, and who have been dismissed after treatment with silver nitrate or calomel powder and told to "forget about it." Six weeks or so later full-blown secondary lesions develop, the spirochaetae become widely disseminated, and their chances of a permanent cure are markedly reduced. This sad sequence of events is of frequent occurrence.

The golden opportunity in the treatment of syphilis lies in its extremely early recognition and intensive treatment. To render our best service we should make our diagnosis in the first week of the chancre, before the blood Wassermann becomes positive. If we can do so, we can expect a very high percentage of cures (90 per cent Stokes). As the blood Wassermann becomes positive this percentage of possible cures declines. It becomes still lower in the secondary stage and very low in tertiary phases. In the latter it is somewhat doubtful, and a moot question, as to whether or not we can use the word "cure" in

speaking of our results. Possibly the word "arrest" would be better. This was demonstrated experimentally by Kolle when he showed that it is impossible to completely eradicate the spirochaetae in a laboratory animal if forty-five days have elapsed after inoculation. The percentage of cures seems to be inversely proportional to the duration of the infection. So the ideal toward which to strive is as early a diagnosis as is possible.

The appearance of a genital lesion is of little value in early differential diagnosis save in textbook types of cases. It would be far better if medical students were taught the futility of attempting to diagnose venereal sores by such clinical symptoms as induration, adenopathy, multiplicity, etc., or by the history of the lesions. These are apt to be snares and delusions. It has been shown that 65 per cent of all genital lesions contain the spirochaeta pallida. This includes the apparently innocent herpetic-looking lesions, so-called hair cuts and soft chancres, many of which we would pronounce harmless, judging by their appearance. *The only safe rule is to regard all genital lesions as potentially luetic until proved otherwise.*

Many physicians depend upon the blood Wassermann for their diagnosis. This surely is a step in the right direction, but even this valuable test will not give us as early an answer as we need, for it is rarely positive in the first week of chancre, when the chances of a cure are highest.

The one certain method of differentiating the primary lesion of syphilis from local lesions is by demonstrating the presence or absence of spirochaeta pallida by means of the darkfield microscope. Theoretically all chancres should show the presence of this organism. However, such variable factors as the personal skill of the examiner, errors in technique or previous local antiseptic treatment make it difficult to find the spirochaetae in all patients. Klauder was able to obtain positive darkfield findings in 94 per cent of untreated lesions which afterward were proved to be luetic.

The original method of doing the darkfield examination on the serum expressed from the surface of the chancre is very reliable; but it is apt to be falsely negative in those cases which have had calomel powder or caustics applied to the lesion prior to examination. This disadvantage can be removed by having physiologic saline packs applied to the sore for twenty-four to forty-eight hours before the next examination, by which time the spirochaetae will have reappeared. An even better method is that of A. Alexio, who recently reported that salt solution injected under the base of a chancre and afterward aspirated would be found to contain spirochaetae in cases in which serum from the surface was negative. If we should fail to find the organisms by these two methods we can resort to that most reliable method of gland puncture. In this procedure salt solution is injected into a neighboring inguinal gland, the gland is somewhat macerated by moving the point of the needle, the salt solution is withdrawn and examined. This is an extremely reliable procedure. It demonstrates the spirochaetae in some cases which were negative by the other methods of examination. Moreover it does away with the danger of mistaking the harmless spirochaeta refringens, which is fre-

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quently found on the genitals, for the spirochaeta pallida. The finding of a spirochete of the appearance of the spirochaeta pallida in an enlarged inguinal gland adjacent to a genital sore is absolute proof of syphilis. The more darkfields I do the more I incline toward using gland puncture or puncture of the base of the chancre. For I feel that by these methods the chances of error are reduced to a minimum. By repeated examinations, using these three methods, we should be able to find the spirochaetae in nearly all chancres, thus closely approaching the ideal 100 per cent.

Having spoken of the necessity of doing darkfields on all genital lesions regardless of their clinical appearance, let us consider when to do them and how often. This is an angle which is neglected in the literature. I have reviewed the Index Medicus in regard to this and have found the authorities to be very vague in their recommendations. Most of them say to do "a darkfield examination" or "dark-field examinations," but do not say how many or when. Others say "several" or "repeated" examinations. Stokes goes the farthest when he says that they should be repeated until definitely proved negative or positive.

I have prepared a chart to illustrate a point which is known by syphilologists but which has not been emphasized.*

Let us say that a man is exposed to a combined bacillus of Ducrey and spirochaeta pallida infection on the first of the month. About the third to the fifth a sore will develop from the chancroid element. He seeks the advice of a careful physician who does a darkfield on the lesion. It will be negative almost of a necessity. Others done at any time from the time of development of the chancroid, even if done daily, will probably be negative up to the twenty-first to thirty-fifth day, at which time the incuba-

tion period of the spirochaeta will have expired, the chancre will have developed and spirochaetae will be found. So we see that there can be a period of several weeks in the development of a mixed sore in which the spirochaetae exist in such meager numbers as to make it practically impossible to find them. Such repeated negative findings might very naturally lead one to the false belief that syphilis could not exist. To avoid this pitfall one must do repeated examinations until negative results have been obtained over a time limit extending beyond the incubation period of the spirochaeta; or until the diagnosis is established by this means, by a positive Wassermann, or by the appearance of clinical signs of syphilis.

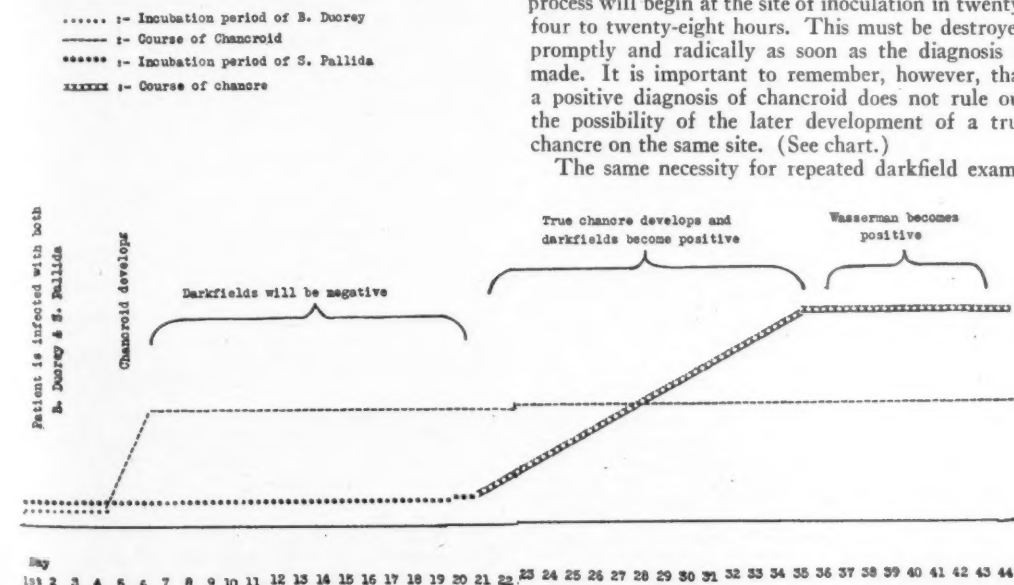
Two other methods exist which help us in making an early diagnosis on genital lesions. These are the Wassermann reaction on the serum expressed from the lesion and the Kahn precipitation test on the same. Both of these become positive before the blood Wassermann does and constitute a valuable, although subordinate aid to the darkfield microscope.

By careful, repeated examinations, using one or more of the aforementioned techniques, we should be able to make an early positive diagnosis in nearly all of our patients. The occurrence of secondary syphilis or of a beginning positive Wassermann in a patient whose genital lesion we had considered benign should cause us to be extremely self-critical, for such oversight should rarely occur.

The nonsyphilitic genital lesions which have to be considered in making a differential diagnosis include soft chancres, herpes simplex, scabies, so-called "hair cuts," inguinal granuloma, epithelioma, and tuberculosis.

Soft Chancre (Chancroid).—The presence or absence of the bacillus of Ducrey can be determined by direct microscopic examination or by culture. If in doubt we can practice the French method of auto-inoculation, in which some of the material from the sore is rubbed onto the scarified arm of the patient. If the original lesion is a chancroid another like process will begin at the site of inoculation in twenty-four to twenty-eight hours. This must be destroyed promptly and radically as soon as the diagnosis is made. It is important to remember, however, that a positive diagnosis of chancroid does not rule out the possibility of the later development of a true chancre on the same site. (See chart.)

The same necessity for repeated darkfield exami-



nation holds true for "hair cuts" which, although merely traumatic at the time, frequently harbor the *spirochaeta pallida*.

Herpes Simplex—Frequently occurs on the genitals. Its onset with burning and itching and the rather characteristic grouped, scalloped appearance, will generally enable us to make a correct diagnosis. However, we should not trust our mere opinion, as a certain number will turn out to be syphilitic. Do a darkfield.

Scabies—Is the one disease occurring on the penis in which I must confess that I generally trust my clinical judgment. The appearance, distribution, intense nocturnal itching and familial contagion are so characteristic as to make the diagnosis practically certain. In atypical cases, however, with a lesion on the penis and very few elsewhere, the diagnosis would rest upon the finding of either the *acarus scabiei* or the *spirochaeta pallida*.

Inguinal granuloma has been found to be due to a specific organism. This organism can be found either in smears or sections taken from the ulcer. It can also be cultivated, inoculated onto experimental animals and recovered from the lesions so produced, thus fulfilling Koch's postulates. A case has been recently reported by J. C. McRae in which this infection and a chancre coexisted. This would further emphasize the necessity for a darkfield examination.

Epithelioma of the genitals can be diagnosed by means of a biopsy and pathologic sections. Tuberculosis also shows a characteristic picture when sectioned, with the added finding of tubercle bacilli in smears or in inoculated guinea-pigs. In the beginning, however, both epithelioma and tuberculosis may be confused with syphilis. So our old friend the darkfield microscope is again of value.

CONCLUSIONS

1. The prognosis of syphilis is best if it is diagnosed and treated before the blood Wassermann becomes positive.
2. Such an early diagnosis can only be made by the darkfield microscope.
3. Darkfield examinations should be done repeatedly until the incubation period of a possible chancre has passed.
4. All genital lesions should be suspected of being syphilitic until absolutely proved otherwise.

DISCUSSION

ERNEST K. STRATTON, M. D. (490 Post Street, San Francisco)—While this subject is of great importance to all medical men on account of the major rôle syphilis plays in every branch of medicine and surgery, it is surprising to note the number of genital lesions which are mal-handled; especially so does this seem, in light of the present-day knowledge and scientific apparatus which is at our command. Everyday patients present themselves in our large syphilis clinics with symptoms of paresis, tabes, angina pectoris, aortitis, etc., and give a history of having had a sore on the genitals, five, ten, or fifteen years ago. Many times their story is, "I consulted a doctor at that time and he informed me that it was nothing serious." Perhaps some dusting powder or caustic application was made, the lesion disappeared in two or three weeks and the patient was grateful, resting secure on this professional opinion until some irreparable damage years later brought him to learn the true nature of his disease. Another class of patients which we see too often are those with lesions on the genitals who have received salvarsan

and mercury, etc., on the suspicion that the genital lesion was a chancre. In such cases the exact status of the patient is then difficult to determine; the darkfield examination of the lesion is then negative, as may also be the blood Wassermann, due to the action of the specific therapy, or to an insufficient incubation period. This state of affairs is confusing to both the patient and physician. If the genital lesion has healed it may have been a benign eruption, such as herpes simplex; if it has not healed, perhaps it was a mixed infection or not specific at all.

I know of no instance where an accurate diagnosis is of more importance than in the case of genital lesions; if the patient's physician is not equipped to make these examinations why not refer him to a dermatologist, who is qualified and equipped to make darkfield examinations, as well as other investigative procedures which his clinical judgment might indicate. Diagnostic cooperation is one of the most important functions of our specialty.

Templeton has had a great deal of experience in this work, and has presented the subject in a thorough manner. In addition to the numerous methods which he has outlined for collecting the material for darkfield examination, I have found that the use of alcohol was of benefit, and have obtained positive findings in some cases where previous specimens had been negative following the usual method of collection.

The technique is, as follows: the crusts, debris, etc., are forcibly removed from the lesion by means of a pledget of cotton wet with alcohol; the alcohol exerts a hygroscopic action, causing an outpouring of serum; three or four wipings are first removed before collecting the specimen. Keeping in mind always the possibility of mixed infections, the diagnosis of chancroid by culture, after the method of Teague and Deibert, I believe is the most satisfactory method of ruling out this infection.

H. P. JACOBSON, M. D. (1016 South Alvarado Street, Los Angeles)—I wish to compliment Doctor Templeton upon the timeliness of the subject-matter and the masterly fashion in which he has presented it to us. The problem of syphilis is, of course, of interest alike to the general practitioner as well as the specialist, as we are all called upon to battle its ravages in some form or other in our daily practices. From the standpoint of prognosis and therapeutics we all agree, of course, that the primary stage—the chancre stage—is most important and upon its recognition will in a large measure depend the ultimate fate of the sufferer. And since the majority of victims with initial lesions fortunately or otherwise fall into the hands of the general practitioner, a timely discussion such as the essayist herewith presents on the differential diagnosis of genital lesions should certainly prove of value and benefit to all concerned. There is one condition, however, which Templeton has omitted to mention in the differential diagnosis which I wish to call attention to as being very important, and that is chancre-*redux*. From a medico-legal standpoint this condition is especially important when a question arises as to the nature of a genital lesion to determine a legal decision. Of course, we are all acquainted with the differential factors that serve to distinguish a primary lesion and chancre-*redux*; the chief difference being a regional adenopathy in the first instance, while usually no pronounced adenopathy in the second. I wish to express my appreciation to Templeton for affording me an opportunity to discuss this important subject and to call attention to chancre-*redux* in a consideration of the diagnosis of genital lesions.

In just the same degree by which the quality of one man's laugh in health differs from that of another, does his manner of sneezing or feeling pain in sickness differ, or his method of resisting or failing to resist bacteria, or of dealing digestively with a Welsh rarebit after midnight.—George Draper, M. D., *Harper's Monthly Magazine*.

Many paronychia begin as an abscess under the nail fold and can be cured, without incision, by lifting the fold up from the nail with the flat of a probe, scalpel, or toothpick. A small wet dressing (with or without a minute drain, as seems desirable) completes the cure in a day or two, as a rule.—*Am. J. Surg.*

THE TREATMENT OF ERYSIPELAS BY ROENTGEN RAY

By J. EDWARD HARBINSON AND JOHN D. LAWSON*

(From the Departments of Medicine and Radiology, Woodland Clinic)

DISCUSSION by William J. Kerr, San Francisco; Albert Soiland, Los Angeles; Hiram E. Miller, San Francisco.

THE multiplicity of treatments advocated for erysipelas is the best evidence that we have had no specific form of therapy. Hippocrates advocated the use of cold water in the treatment of this disease. At the present time popular therapy, as stated by Doane, varies from the exhibition of Saint Anthony's bones to the application of cranberry poultices and the use of red flannel shirts.

Among the standard forms of treatment are: the local application of hot or cold compresses of a saturated solution of magnesium sulphate; various types of antiseptic solutions and ointments; mercuriochrome, gentian violet and other dyes intravenously; foreign blood injections; and antistreptococcic serum. For wandering erysipelas the collodion line, phenol line and other methods of compression have been used with varying success.

Despite treatment by these methods, erysipelas generally runs its course of from ten days to two weeks, treatment, in most cases, being of value only in relieving the patient symptomatically and having no influence on the lesion itself. The mortality varies from 4 to 7 per cent, being especially high in infants and almost universally fatal when the umbilical cord is involved.

Roentgen therapy for erysipelas has received very little attention in American literature except for occasional references in general articles. Hodges states that treatment by this method is valuable if only small areas are involved, and he reports good results in two cases. He advises against this form of therapy in severe, advanced lesions and in patients with an infected area more than 6 cm. in diameter.

Mackey, discussing Hodges' paper, reports the treatment of eleven patients, in ten of whom the temperature became normal in thirty hours without recurrence of fever. He concludes that the course of the disease is shortened by roentgen ray treatment.

There are several articles in the European litera-

ture in regard to this type of treatment. In 1917 Magalhaes was an unfortunate victim of erysipelas and followed the usual treatment, including serotherapy, without relief. Some time previous to the attack he had had occasion to treat a patient with carcinoma who also had erysipelas of the leg. The erysipelas was cured by the x-ray treatment. Magalhaes then decided to try this treatment upon himself and, after an exposure to the x-ray for fifteen minutes, he was able to walk with very little pain. The pain began to recur the next afternoon and he made another exposure, with complete relief. Subsequently he treated nine patients with about the same results as he had received. A gas tube and a low spark gap with a relatively long exposure was made over the affected areas and glands. In the same year (1917) Schmidt treated twenty-eight patients in seventeen of whom a drop in temperature by crisis followed one or two treatments. In four patients the drop in temperature was by lysis after two treatments; in three there were complications with extension to the mucous membrane, one with abscess. A marked retrogression of the skin condition occurred in twenty-five patients, in the other three the symptoms persisted. Daily treatments were given by rays filtered by 3 mm. aluminum.

In 1918 Hess treated fifty patients suffering with erysipelas of whom forty-three had fever. In twenty-two the temperature declined sharply in from one to two and one-half days after x-ray treatment; in six the temperature fell by lysis in two to three days; in nine there were complications, such as abscess and lobar pneumonia, and in six the erysipelas wandered to other areas. Daily treatments were given, aluminum filtered radiation being used.

In 1921 Schrader reported seven patients treated by roentgen therapy. Six yielded very promptly to treatment; one showed slight recurrence necessitating reirradiation; in five the temperature fell by crisis; in two by lysis. All yielded. He makes no statement of the technique used.

At the Woodland Clinic we have treated eleven patients with this form of therapy. In three only a small area was involved, while in the remaining moderate to large areas were infected. The temperature varied from 100 to 106; in four patients the temperature fell by crisis in twenty-four hours, while in six the temperature fell by lysis in from two to five days. In one patient the temperature dropped by crisis in twenty-four hours and remained normal for a day; then erysipelas occurred in a new area with high fever, which fell again by crisis within twenty-four hours, following another treatment. The symptoms disappeared within this time. In two patients there was an extension after the first treatment which promptly yielded after the second treatment. In every instance there was prompt relief from pain within twenty-four hours.

The average length of illness was five days and most patients received two treatments and none more than three treatments. Two patients had marked cervical adenitis which promptly responded to roentgen ray therapy. There were no other complications.

Our technique is very simple: the areas involved and a border of about 5 cm. are irradiated with

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John D. Lawson (Woodland Clinic, Woodland, California). M. D. St. Louis University, 1920. Present hospital connections: Roentgenologist Woodland Clinic and Hospital. Scientific organizations: American Roentgen Ray, Radiological Society of N. A., Pacific Coast Roentgen Ray, Yolo-Colusa Medical Society, C. M. A., A. M. A. Appointments: Captain M. O. R. C. Practice limited to Radiology since 1923. Publications: "The Treatment of Pyogenic Infection by Roentgen Irradiation," Radiology, February, 1926; "The Diagnosis and Treatment of Intrathoracic Lymphadenopathy from a Roentgenological Viewpoint," Am. J. Roentgenol., 1925; "Report of a Case of Gastric Diverticulum," Radiology, 1926; "Ureteropyelography in the Differential Diagnosis of the Upper Urinary Tract," Am. J. of Roentgenol., 1924; "Roentgen Therapy of Uterine Myoma During Pregnancy," California and West. Med., March, 1925; "Iodized Oil in the Diagnosis of Empyema and Flatulous Tracts," Surg. Gynec. Obst. (in press).

unfiltered radiation at 100 Kv., 50 cm. distance and 35 Ma minutes over each area. This is approximately two-thirds of an epilating dose and one-half of an erythema dose. Irradiation is repeated in two days if regression has not been satisfactory. A third treatment was administered to one patient, using the same factors, with no complication more serious than a definite first degree erythema.

Our experience seems to indicate that the skin is much less sensitive to irradiation when there is a definite cellulitis present than it is in its normal condition. None of these patients has had skin changes after recovery which could in any way be attributed to irradiation.

Holtzkecht's theory is that irradiation increases the metabolic rate of the cells, thus assisting in the destruction of the bacteria, also that the rays produce changes in the organisms which precludes their further production of toxin. Whatever the explanation the sharp drop in temperature shows it to be consequential. Holtzkecht's theory appeals to us as being the most logical of those advanced.

CONCLUSIONS

1. Roentgen therapy for erysipelas is a valuable form of treatment.
2. Relief is obtained generally within twenty-four hours.
3. The febrile period is shorter than in infections of equal severity treated by other measures and the usual length of illness is shortened.
4. There are, possibly, fewer complications and less chance of spread than in other forms of treatment.
5. There is no pain or discomfort attending the treatment.
6. Advanced, serious cases of erysipelas, involving fairly large areas, with high temperature and general infection may be treated successfully.

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DISCUSSION

WILLIAM J. KERR, M.D. (University of California Medical School, San Francisco)—The authors present a series of cases on the treatment of erysipelas with roentgen ray which should be of interest to all clinicians. We are all familiar with the variability of erysipelas in its clinical features; its tendency to end by crisis in a considerable number of cases in a definite period of time. It makes it, therefore, somewhat difficult to interpret the value of any special therapeutic measure under such conditions, unless we have a sufficiently large series of cases with adequate controls. The authors do not give sufficient clinical data to prove that the x-ray treatment materially shortened the course of the disease, although the average

duration of fever and the eruptions on the face were apparently shorter than ordinarily seen.

The question as to the possible effect of the roentgen ray upon the process has been discussed, and it would seem to me the most likely benefit that could be expected would probably come from a stimulation of the reticulo-endothelial system in the areas adjacent to the eruption. It has been shown definitely by experimental work that the organisms precede the indurated border as it advances in the tissues, and the roentgen ray may so stimulate the reticulo-endothelial system that the processes of immunity may be stimulated locally. The authors have not given adequate consideration to the recent experimental and clinical studies on the organisms responsible for erysipelas. It has been pretty definitely shown, I think, that a group of hemolytic streptococci are responsible for the disease, and when the soluble toxin is injected into the horse it will stimulate the production of an immune serum. An immune serum has been developed which causes local blanching upon injection into the erysipelas lesion and, when given intravenously in sufficiently large doses, apparently controls and limits the course of the disease. This would place erysipelas in about the same category as scarlet fever.

It is possible that roentgen ray therapy may be used as an adjunct to the serum therapy for erysipelas, but I do not feel it would entirely replace it in general use. Of course, one must keep in mind the precautions necessary and the dangers in the use of serum therapy.

ALBERT SOILAND, M.D. (1407 South Hope Street, Los Angeles)—The paper by Harbinson and Lawson stands out notably because of the brief and straightforward manner in which the subject is presented and the common-sense deductions from the authors' observation of the work. Among radiologists it is generally known that radiation in the proper wave form is suitable for surface lesions with or without infection. Nearly every radiologist who has had experience with radiation therapy has been struck by the rapid response to surface radiation of infectious processes either of the skin or mucous membrane.

It is rare for any individual to have the opportunity to treat this disease in numbers. We have, however, in our service had sufficient experience with erysipelas to support the authors' remarks.

With our modern knowledge of the biological effect of radiation there is ample ground for its use in the class of cases presented by the authors.

HIRAM E. MILLER, M.D. (384 Post Street, San Francisco)—Any therapeutic aid in the treatment of so serious and so frequently fatal a disease as erysipelas is most welcome. I personally have never treated erysipelas with the roentgen ray, and I do not think that the reports in the literature have been particularly convincing. From my experience in treating other acute infections of the skin with the roentgen ray I cannot feel that it has a very definite place in the treatment of erysipelas if the dosage as used by the authors is necessary. They state that most patients received two treatments of one-half an erythema dose each—that is to say a full erythema dose. I personally would feel that a skin traumatized by an erythema dose of roentgen ray would be an excellent field for a few lingering streptococci to start a recurrent and most virulent attack of erysipelas. I wonder if the same therapeutic effect could not be produced by two treatments of, say, one-eighth to one-fourth of an erythema dose.

AUTHORS (closing)—Since writing this paper Birkhaug has published his work on the treatment of sixty cases of erysipelas with specific antiserum. It would be interesting to compare the results of this form of therapy with roentgen ray therapy in an equal number of patients with erysipelas of about the same severity. We believe, if roentgen ray therapy proves to be as efficacious as treatment by specific antiserum, the former should be the treatment of choice, principally on account of the danger attending the administration of any type of antitoxin.

We realize that only a small series of cases have been reported in this paper, but the results have been very encouraging. Perhaps the report of these cases may stimu-

late others to report their results with roentgen ray treatment of erysipelas, thus giving more data so that reliable conclusions may be drawn. Most physicians have had very limited, if any, experience in treating erysipelas by roentgen ray. We are very glad to have the encouraging support of Doctor Soiland and, until we are convinced by further reports that erysipelas antistreptococci serum is definitely a better form of treatment for erysipelas, we shall continue to treat our patients by roentgen ray therapy.

The literature on this subject is quite meager, as already pointed out, and found only in the European journals. Consequently we cannot expect a preponderant mass of evidence in favor of the treatment.

One of the authors (Doctor Lawson) has recently published an article dealing with pyogenic skin lesions and their treatment by roentgen ray. He has observed that skin which is the site of an active infection will withstand from two to three erythema doses without showing any evidence of roentgen trauma. This observation has been substantiated by many roentgenologists who have treated these cases. In our experience we have not found very small doses, that is one-eighth to one-fourth of an erythema dose, to be efficacious.

CONGENITAL ATRESIA OF THE DUODENUM

WITH REPORT OF A CASE

By C. VERNER THOMPSON *

THE report of such a case as this is justified only because of the rarity of the condition. According to Tyces' system the first case was reported in 1803. Since then something over one hundred have appeared in the literature, and according to Abt there have been but three cases that have survived. These three were necessarily treated surgically.

The underlying cause for the appearance of an atresia in any portion of the intestinal tract is many times obscure. Several theories have been advanced that will account for one or a few of the lesions reported, but there is no theory that will adequately explain all atresic lesions.

One theory is that in the course of fetal development there occurs a desquamation of cells into what becomes the lumen of the gut. Canalization or an absorption of these desquamated cells then occurs as the fetal life progresses. One author has stated that the presence of the atresia may become defined as early as the fourth week of fetal life. With this idea of the absorption of an epithelial plug in the intestinal tract in mind the reason of the three types of atresias that occur becomes clear. The atresia may be (1) complete, (2) partial, and (3) in the form of a diaphragm as when all but a thin portion of the plug is absorbed.

The duodenum seems to have a certain predilection for the formation of atresias because in the few inches almost half as many occur as in the many remaining feet of gut. The involved area is more frequent in the region of the ampulla of Vater and usually just above the ampulla. The presence of one such anomaly is frequently associated with some other type of deformity; imperforate urethra, spina bifida, imperforate anus, bifurcation of the esophagus or multiple atresias in the intestinal tract else-

where being a few of the other anomalies. The mesentery or mesocolon may be partially absent or otherwise deformed. Peritonitis may be present and is usually considered of syphilitic origin.

The babies in certain instances are premature, but as a rule they are fully developed and to all appearances when delivered are perfectly normal; they are often the first born.

In general the symptoms of duodenal atresias are rather constant depending somewhat on the exact site of the obstruction and are characteristic of obstruction.

Vomiting is always present, appears immediately with the ingestion of fluid or food, starts in easily, rapidly becomes projectile, and may come immediately with the taking of food or may follow in a few minutes to half an hour or more.

Constipation is present and becomes decidedly noticeable after thirty-six, forty-eight hours or more. The movements from the meconium present may mask the fact for a number of hours that the little patient is passing nothing through the bowel.

Distention becomes marked in a short time and, of course, is more pronounced just after the taking of fluids and just before it is vomited. With the obstruction in the duodenum the distention is marked in the upper abdomen giving the belly a funnel-shaped appearance.

Peristaltic waves can always be distinguished above the obstruction if care is used in looking for them.

Anuria, because of the small absorption of fluids, soon becomes apparent. Jaundice may or may not be present and probably will not help in making the diagnosis.

Emaciation is usually rapid, especially after the first twenty-four or thirty-six hours.

Restlessness may or may not be of diagnostic help early in the life of the infant. With the dehydration that follows the inability to absorb fluids the babies frequently become restless and their cry soon begins to lose its vigor.

Differential diagnosis must take into consideration hypertrophic pyloric stenosis, cerebral hemorrhage, and acquired obstruction such as an intussusception. The diagnosis should be determined early. Hypertrophic stenosis must be ruled out. This can as a rule be done by the frequent presence of a palpable mass in the upper abdomen, and the onset of the symptoms in a case of pyloric stenosis is not always of the abruptness that is found in atresia. The hypertrophic pyloric type of obstruction as a rule allows small amounts of food to pass by and appear in the stool. The symptoms therefore do not become so pronounced until several days, weeks, or even months have elapsed.

Cerebral hemorrhage can be ruled out by the early appearance of food products in the stools and the absence of distension.

An acquired obstruction such as may come from a volvulus or from bands cannot be differentiated from an atresia if it is present at birth or if it appears very soon after birth.

The prognosis as has been indicated is very grave. Operative procedure is justified at the earliest possible moment after the diagnosis has been deter-

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mined In the event that a single lesion is found in the duodenum gastroenterostomy is probably the operation of choice as having less technical difficulties when handling the small viscera of an infant. In the hands of a qualified surgeon resection of the atresic portion with an end-to-end anastomosis may be attempted.

CASE REPORT

Full-term baby girl born March 31, 1926, of a 30-year-old white primipara, after a normal labor of seven hours. Midline episiotomy done at delivery to save undue stretching of the perineal tissues. The past history of the mother was of no consequence in regard to the baby. She had had no serious illness, no history suggesting tuberculosis or syphilis. She had been married three and one-half years, husband apparently healthy. Family history: one sister's first baby, delivered at full term had a meningococcal of which it died at 8 days of age. This same sister has since had two normal healthy babies. A second sister has had three healthy babies. A third sister, unmarried, has been operated on for tubercular peritonitis. One brother living and well. The mother's parents are living and well. The mother is well developed and nourished. The physical findings are essentially negative. She has a slightly enlarged thyroid. No evidence of tuberculosis. Blood Wassermann negative.

The infant was a plump, well-developed, full-term baby that cried lustily at birth. A careful examination following delivery revealed an apparently perfect baby. Vomiting occurred shortly after the first water had been given. The baby continued to vomit a few minutes after each feeding. It would retain feeding or fluids for twenty or thirty minutes and at times as long as one hour. After about twenty-four hours it was noticed that the vomiting had become projectile in character and also after the first day of life the vomitus was bile-stained. The baby slept

and rested well and took the nipple or breast with vigor. She voided freely the first two days, then the urine output became very scant. Meconium was passed freely a few hours after birth and she continued to have one or two movements daily, the quantity diminishing each day. Jaundice appeared on the third day. Distention of the upper abdomen with visible peristalsis was demonstrated. The baby continued to rest well and seemed contented until the end of the fourth day, when it cried more than usual. Water and glucose solution by bowel prevented dehydration from becoming especially pronounced.

The diagnosis was complete obstruction and probably of the third portion of the duodenum just below the ampulla. The constant vomiting, distention, peristaltic waves moving from left to right across the upper abdomen, and the vomiting of the bile with the nonappearance of changes in the stool and the presence of the progressive anuria were the features that determined the presence of an obstruction and its probable location. There was no palpable mass in the region of the pylorus.

A small amount of barium was mixed in the feeding formula. Under the fluoroscope, deglutition seemed normal. A moderate cardiospasm was demonstrated. The stomach was greatly dilated and there was an increased motility in the region of the pylorus. The first portion of the duodenum was greatly dilated, so much so that the roentgenologist had some difficulty in deciding just where the stomach left off and the duodenum began after it was once filled. No passage of the feeding into the jejunum could be demonstrated.

Operation revealed the anticipated findings. In addition to the atresia in the third portion of the duodenum, which consisted of about three-quarters of an inch of closed gut, the stomach and intestine were covered with fine web-like adhesions. In the mesentery of the jejunum were many small palpable nodules of pinhead size suggesting peritoneal tubercles. There was no mesocolon present. The lumen of the gut was closed off for a distance of three-quarters of an inch in the third portion of the duodenum just below the ampulla. Resection of the atresic portion of the gut was done and an end-to-end anastomosis was ultimately completed. The anastomosis was difficult to complete, as the proximal portion underwent rapid digestion from the influence of the pancreatic juices. The dilatation of the upper viscera had thinned the duodenum to the point that it could hardly be made to hold the suture material.

From the technical difficulties encountered with the open end-to-end anastomosis in an infant a gastroenterostomy in this case possibly would have been the better choice of procedure. Certainly in the hands of a less experienced surgeon than Doctor Harris, gastroenterostomy should be the procedure of choice in such a condition in an infant because less difficulties of technique are apt to be encountered.

The baby made a rapid recovery from the anesthetic and gained strength the following day. Death occurred the third day after operation or the eighth day after birth.

It is with regret that this report is being made without the more complete information that would have been obtained and had a pathological study of the specimen been carried out.

I wish to acknowledge indebtedness to Drs. Fred F. Gundrum, Junius B. Harris, and Harold Zimmerman as consultants in the study of this child.

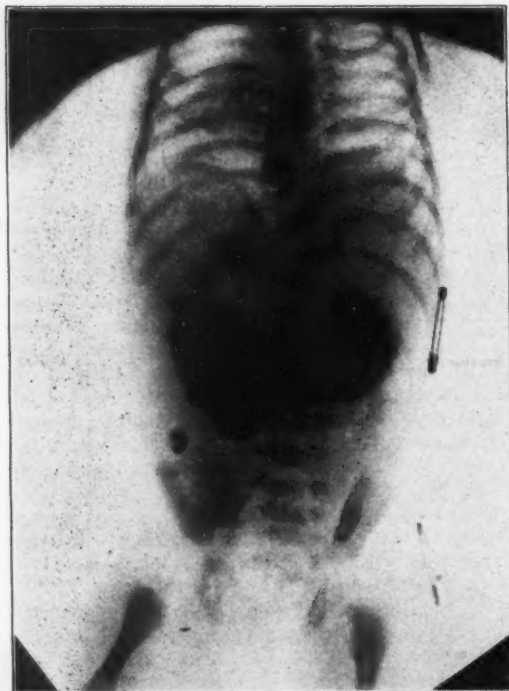


Fig. 1—Screens and films of the stomach with a barium meal demonstrated an obstruction of the bowel at about the junction of the first and second portions of the duodenum. There was very vigorous peristaltic action. The stomach was large and the first portion of the duodenum was distended. Examination forty-five minutes after the meal showed nothing to have passed the point of obstruction.

To each age its own bogey. To Victorian England the specter of Philistinism, to our own day the bugbear of standardization. Or perhaps after all they are one, and Philistinism the encroachments of which on the life of the spirit Matthew Arnold so passionately decried, and standardization, which we so stridently denounce, are only interchangeable terms for smugness and indifference and materialism. Our expostulators, living in a mechanistic age, ascribe to industry the results which the Victorian critic belabored from a different point of view. But, like him, they fear the swamping of the higher values of life by complacent materialism.—*Saturday Review of Literature.*

SYPHILIS—WHEN IS IT CURED?

By IRVING R. BANCROFT *

WHEN the spirochaeta pallida was discovered in 1905, and especially when it was cultured on artificial media and also inoculated successfully in rabbits and monkeys, it seemed as though we would soon know all about syphilis, but if one studies the vast literature of syphilis he will find it like the Bible—any thesis may be proved which fits the fancy of the individual. For instance, using the work of Warthin as a basis one might conclude that the present-day treatment did no more than to drive the spirochaetae into inaccessible parts of the body like the walls of the blood vessels, especially of the aorta and the heart. He found evidence of syphilis in practically every necropsy of a person who ever had syphilis and in 40 per cent of 750 general autopsies. His studies are all in stained tissue and are made with great thoroughness. For instance, one of his assistants spent a whole year in the study of eight cases, and six weeks were spent on one heart before spirochaetae were found. His conclusions are that the blood vessels and other organs are affected more or less in every person with syphilis. Graves, working along more neurological lines, stated that a syphilitic ought never to marry, as our cures were symptomatic only. Elberston, working from the animal experimental side, showed that syphilis, when outwardly inactive and latent as far as we could discover, still may be associated with spirochaetae which are located in the glands and semen and which may be successfully inoculated into other animals.

If we approach the problem from a therapeutic point of view we come to the researches of Naguchi in testing the action of drugs on the growing spirochaetae. He measured the amount of various drugs which were necessary to kill the spirochaetae as they were growing in a certain amount of culture medium. Neoarsphenamine was a spirochaetocide in a proportion of 1 to 2500, and after reculturing for several generations six times the original amount of the drug was necessary to kill the organisms. Arsphenamine was three times stronger than neoarsphenamine. Mercury was an efficient spirochaetocide (1 to 100,000), but by reinoculation for several generations a strain of spirochaetae was developed which required thirty-five times the original dose to kill. He also found that after a rest for a generation or two without the addition of any drug that the original sensitiveness to the drug returned. This would seem to indicate that rest periods and a change of remedies are a logical procedure. If we estimate that one-thirteenth of the body weight is blood and .6 gram is the dose of neoarsphenamine used, we would have to use approximately fourteen times the dose we do to get the spirochaetocidal effect, if human blood was used as a culture medium. In the course of syphilis a certain degree of natural immunity seems to be developed as time goes on.

At first the blood contains spirochaetae, but after a time none can be demonstrated. Certain workers have used the blood from donors who were known to have had syphilis some time previously for transfusion without infecting the recipients. Juregui and Lacelotti have infected llamas and kept them infected for nine years, and have used the serum from these animals in the treatment of fifty cases of syphilis with results well comparable with specific drug treatment. However, it is fair to say that these results have been questioned. The basis of the specific protein and malarial treatment is also probably that of increasing the natural immunity, and possibly the so-called spirochaetocides do the same thing. At any rate it seems probable that the reaction of the human organism to a syphilitic infection is to develop a definite immunity.

In addition to the natural immunity which all evidence seems to indicate is a factor in the elimination of a syphilitic infection from the body we have the so-called syphilitic specifics. The experiments of Chesney and Kemp give much information and encouragement on this subject. Their experiments were performed on rabbits which were inoculated with spirochaetae and then treated with arsphenamine. They found that after a course of treatment that inoculations of extracts from the glands and organs of the rabbits were not infectious to healthy rabbits, but the untreated controls were capable of causing syphilis in another group of healthy rabbits and cures took place equally well in both old and recent cases. The doses given corresponded to .6 gram for a 132-pound man. He did other experiments in which a strain of organisms were used which had proved refractory to treatment in the human patient, and yet by inoculation experiments and treatments was proved to have been entirely cured in the rabbit. This would indicate that the rabbit has more immunity to syphilis than man.

Let us then cling to the belief that syphilis can be definitely cured, although we know that there are persons in whom the organism lies dormant or harmlessly latent for years and then may awaken to activity. All individuals who have ever had syphilis should have occasional health surveys to see if there is any evidence of renewed activity. If a definite criterion of cure is wanted the army standard is possibly the best. This requires one year of observation after all treatment has been stopped. During that year there must be no positive Wassermanns, and at the end of the year a negative spinal test and a provocative Wassermann, but in one hundred such cured patients again observed at the end of the second year, 14 per cent had relapsed and nine were doubtful. Most authorities permit marriage in an individual who has had no symptoms for two years following the cessation of two or three years' treatment and irrespective of the Wassermann. This differs little from the standard of the older Fournier, and I cannot see why the presence of either a positive or a negative Wassermann has much to do with the matter.

The Wassermann reaction if positive probably means an active response of the body tissue to syphilitic infection and as such is of value from a diagnostic point of view. It is probable that a positive reaction may also exist when there is a cured or

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latent syphilitic. Chesney and Kemp showed that a rabbit which had been treated for an old infection and still had positive reaction was not infectious when its glands and organs were inoculated into a healthy rabbit. Walserlin and Carroll, on the other hand, while using rabbits showed that in recent cases the positive Wassermann existed when there were active lesions and became negative when the active lesions subsided. The positive Wassermann then indicates that syphilis is present and in old and treated cases may mean that spirochaetae are hibernating in inaccessible parts of the body and that the individual may live his normal expectancy unless something happens to disturb the balance. We all know that there are patients in whom the infection is old, who have a positive Wassermann and in whom no treatment or combination of treatment can make negative. In a series of this character who were treated at the New York Hospital for an average period of forty months only 56 per cent were made negative, so don't get discouraged if some of your old patients still have a positive Wassermann. *Above all do not hasten a fatal issue by too intensive treatment.*

Most syphilitic patients are led to believe that their great cross is a plus Wassermann. They think themselves cheated if after a few doses of salvarsan it still remains positive. They even become syphilophobiac simply because of the 4 plus Wassermann. As soon as it becomes negative they say, "At last I am cured." Some physicians even encourage or support this view, but if they would stop to think they would realize that a negative Wassermann does not mean a cure. If the Wassermann reaction is not a reliable index of cure, what are we to rely upon? Physical examination surely will not definitely determine whether or not a cure has been effected. Warthin cites five cases where the Wassermann of both parents was negative and syphilitic babies were born, so therefore it seems fair to conclude that there is no definite criterion as to the cure of syphilis.

The important conclusion to be drawn, then, is not when a syphilitic patient is cured, for that is sometimes a question of academic interest and no one can tell definitely. The real question is when and in what amounts and for how long treatment should be given. Most early lesions can be made harmless, latent or cured, but the period during which treatment should be given should be longer than is usually advised and an occasional survey should be made of the individual for many years afterward. Patients with early lesions require, as a rule, from one to three years' treatment, and most of those with late lesions should have nearly as long a course of treatment, but the doses should be smaller. Nerve syphilis may require some form of intraspinal or malarial treatment, but that is another story. Late heart and organic types should have an entirely different procedure. Arsenic is often injurious to them and should be preceded by iodide and mercury and then small doses of arsenic preparations given carefully. The treatment of all patients should be modified by their conditions and an annual examination should be made for many years to see if any signs of syphilitic degeneration can be detected.

Special Article

HYPOPHYSIS VERSUS HYPOTHALAMUS

By H. LISSER *

THE writer prefaced a chapter on the pituitary body with the following quotation:

"Thus do interpretations throng and clash, and neatly equal the commentators in number. Yet possibly each one of these unriddlings, with no doubt a host of others, is conceivable, so that wisdom will dwell upon none of them very seriously" (from Jurgen, by Cabell).

This quaint bit of irony, to some extent at least, reflects the present status of pituitary problems.

Several years ago (about 1920) Camus and Roussy declared war on the then prevalent conceptions of pituitary function. They seized upon a relatively unexplained region, the hypothalamus, not far from the hypophysis, and established their base of operations in the tuber cinereum. They contented themselves, modestly at first, by stealing the diabetes insipidus syndrome from pituitary ownership, which they produced experimentally in dogs by injuring the tuber cinereum (the hypophysis remaining intact). Before long they made another invasion and laid claim to proprietary rights over Frölich's adiposogenital dystrophy which had been in possession of the pituitary since Frölich's first description in 1901. They had reproduced this clinical complex in dogs by traumatizing the hypothalamus (again, supposedly, without harm to the hypophysis).

Meanwhile the pituitary body was torn asunder. Originally separated into two parts, a front and a behind, further investigation produced further divisions: a pars intermedia, and a pars tuberalis (surrounding the infundibular stalk and extending up into the floor of the third ventricle). The respective guardians of these several lobes claimed certain characteristics, powers and functions for their pet portions which conflicted or trespassed one upon the other. In the confusion such matters as skeletal growth, genital disturbances, obesity, emaciation, polyuria and polydipsia, and interrelations with other ductless glands (especially the thyroid, suprarenals, and gonads) became involved and disputed. Laborious classifications of the several functions of the several lobes, whether clinical, pathological or physiological, did not serve to clarify the confusion. Laudable efforts they were, but their orderliness did not rest on sufficiently secure foundations.

The attacks of Camus and Roussy, aided and abetted by Bailey and Bremer, Houssay, Leschke, Curtis and others, caused dismay in the ranks of the

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traditional hypophysectomies and some forsook their pituitary allegiance, fleeing over the pituitary stalk into the depths of the hypothalamus to rally round the new genitotrophic centers. The vanguard of the hypothalamists became so radical in their views that they refused to admit that the pituitary exercised any function whatsoever. Its indispensability to life had already been challenged (Dandy, etc.); now even its functional significance was scorned.

It was fortunate in this turbulent state of affairs that two leaders arose, one a veteran of adrenal fame, Professor Abel of Johns Hopkins, the other, Professor Evans of the University of California. The former took charge of the posterior portion of the hypophysis, while the latter concentrated his efforts mainly on the anterior lobe. They entrenched themselves within the sella turcica and speedily regained some of the ground which seemed to have been lost.

Professor Abel isolated a tartrate from the pars posterior and pars intermedia, not yet of entire chemical purity, but of extraordinary potency being 1200 times as powerful as the acid phosphate of histamin, heretofore the strongest smooth muscle stimulant known. Abel and Geiling observed "that the floor of the third ventricle in the immediate vicinity and inclusive of the tuber cinereum contains a blood-pressure-raising and oxytocic substance quite indistinguishable from that present in the posterior lobe of the hypophysis." In ablation of the hypophysis this accessory tissue cannot be removed; it could still perform the function of the posterior lobe and thus prevent a diabetes insipidus. Abel,¹ therefore, is disinclined to accept the negative position of Camus and Roussy "in regard to the function of hypophyseal tissue."

Evans² and coworkers prepared a fresh bovine anterior lobe fluid which had remarkable growth-inducing properties. Repeated injections of this fluid into normal rats produced gigantism, and a replacement therapy with this extract, in rats dwarfed by an early hypophysectomy, stimulated normal growth and repaired the pituitary deficiency. This work was so convincing that Roussy and Bremer have retracted somewhat from their complete skepticism of pituitary function and have granted that "the rôle of the anterior pituitary in skeletal growth is well established."

P. E. Smith, who, it will be remembered, performed the delicate hypophysectomies on tadpoles and who was able to repair the resultant disabilities (a slowed growth rate, suprarenal cortex and thyroid atrophy, pigmentary changes and failure to metamorphose) by injections of Evans' bovine anterior lobe fluid, proceeded to collaborate with Evans in experiments on the rat. At first he produced pituitary deficiency by what he now calls a "crude method," the injection of chromic acid into the gland. Dwarfism not only resulted from this operation, but also significant degenerations in the thyroid, suprarenals, and gonads. As related, the dwarfism was corrected by injections of Evans' anterior lobe fluid, but late reports indicate that the secondary

changes in the other endocrine organs cannot be repaired by this hormone.

Smith,³ now at Stanford University, sheds further light on these problems in a recent paper. He has devised a new method of pituitary ablation in the rat. The gland is sucked out through a glass cannula with negative pressure, after the ventral surface has been exposed. The dural sheath of the gland, dorsally, and the pituitary stalk are left intact, which prevents the escape of cerebrospinal fluid. The hypothalamus is not injured. In another series of rats the pituitary has been carefully avoided while lesions have been made in the hypothalamus. Smith claims that "these two operations, pituitary ablation and tuberal injury, produce distinct and characteristic syndromes." The hypophysectomy syndrome consists chiefly of: "an almost complete inhibition in growth in the young animal, and a progressive loss of weight (cachexia) in the adult; an atrophy of the genital system with loss of libido sexualis, and in the female an immediate cessation of the sex cycles; an atrophy of the thyroids, parathyroids and suprarenal cortex; and a general physical impairment." This experimental syndrome corresponds closely to the clinical complex, hypophyseal cachexia (Simmond's disease), of which a few cases have been recorded (mostly in the German literature), characterized as a rule by a chronic course, progressive emaciation and fatal termination; the only lesion at necropsy being a complete atrophy of the pituitary body. Smith has been successful in restoring his hypophysectomized rats to normal, both male and female, young and adult, not only in respect to growth but also as regards gonadal function and repair of thyroid, parathyroids and suprarenals—by a replacement therapy consisting of daily intramuscular homotransplants of living hypophyseal tissue.

In contrast to the foregoing, injury to the hypothalamus produced adiposity and genital atrophy, an experimental state corresponding to what is generally referred to, in the human, as Frölich's syndrome (dystrophia adiposogenitalis), although the original case of Frölich's, a boy with pituitary tumor, also showed skeletal undergrowth. It must be admitted, however, that this relatively common clinical disorder is but rarely attended by skeletal retardation. These clean-cut experiments of Smith are rather a shock to those who cling to the idea of a pituitary obesity, and who believe they have helped to reduce such adiposity and restore menstruation by the administration of pituitary extracts. This tuberal obesity may be extreme, biochemical examination disclosing that 50 to 75 per cent of the total weight is fat. Injection of Evans' anterior pituitary extract has no effect on the adiposity or genital dystrophy, but Smith does not state whether transplants of living pituitary tissue are likewise ineffectual.

It would seem, therefore, that the pituitary body has not entirely lost its place as an endocrine organ, but that some of the metabolic derangements formerly ascribed to it (obesity, polyuria, polydipsia, etc.) may be due to disturbances of so-called genitotrophic centers in the hypothalamus. But the end is not yet, and a "prepared open mind" is the safest

1. Bull. of the Johns Hopkins Hospital, 1926, 38, 1-32.

2. The Function of the Anterior Hypophysis, Harvey Lecture, 1924.

3. Journal American Medical Association, 1927, 88, 158-161.

attitude. In other words, one may be permitted a certain conservatism sitting on the fence, as it were, the fence in this case being the pituitary stalk, with one foot in the hypophysis and the other in the hypothalamus. Such a compromised position has been adopted by Biedl, who offers a theory which Solis-Cohen described as "more than highly plausible," even "seductive." For such disorders as Frölich's syndrome and diabetes insipidus he would postulate three pathogenetic possibilities: (a) disease or defect of the hypophysis (pars intermedia or posterior lobe) with deficient hormone; (b) obstruction of an assumed pathway (for instance by tumor or internal hydrocephalus) preventing a normal amount of hormone from reaching or energizing certain metabolic and genitotrophic centers in the hypothalamus; and (c) cerebral lesions of these alleged trophic centers themselves, such as tumor, traumatism, tuberculosis, syphilis or encephalitis, or congenital defect.

This platform is certainly broad enough for all parties to the controversy, probably too broad. Meanwhile many of us as interested spectators can take seats on the pituitary stalk and watch the struggle between hypophysis and hypothalamus.

CLINICAL NOTES, CASE REPORTS AND NEW INSTRUMENTS

STAPHYLOCOCCUS SEPTICEMIA

CASE REPORTS

By ALFRED C. REED AND FRANK E. STILES *

CASE 1—E. E. This patient, a girl aged 14, was admitted complaining of deep pain in the right thigh. She stated that as she was getting up from the supper table four days before admission she experienced a severe sharp pain in her right thigh about halfway between the knee and the hip. Previous to this she had been feeling well, doing her daily duties and playing with other children with no discomfort whatever. The pain increased, she remained in bed four days, and as there was no improvement sought medical relief.

Past History—Had measles at 3; tonsillitis followed by tonsillectomy at 10; mumps at 13; and influenza ten months ago. Last year she had several generalized crops of boils, the last of which disappeared six months ago.

Physical examination showed a well-developed and well-nourished girl with flushed, dry skin, lying in a fixed position, although not evidently in great pain. The anterior cervical glands were somewhat enlarged. Her extremities presented the only important abnormalities. There were many small maculo-papular lesions on both

legs. Some small old scars were seen on the legs, residua of the boils of six months previous. Definite point tenderness was elicited over the upper third of the right femur, and she cried out in pain upon flexion of the leg on the thigh.

Laboratory work on admission showed a red blood count of 4,000,000 with 70 per cent hemoglobin, and a white count of 8600 with a normal differential count. The urine was normal. The Wassermann was negative.

Her temperature was of a septic type, high in the daytime and low at night, ranging from 105 to 100 F. Raised, swollen, painful areas similar to that on the thigh appeared day after day in the following order: the left thigh, left leg, right hand, sternum, left arm, left hand, right arm. Three blood cultures taken on successive days were all positive for staphylococcus aureus. The red cell count ranged from 4,000,000 on admission to 2,600,000 the day before death. The white count ranged from 9000 to 5000, the latter being the last taken. The polymorphonuclear content never rose above 76 per cent. X-rays of the right femur and hip were negative. Except for slight delirium on the second day when her temperature was 105, she was mentally clear till the morning of her death, and except for the painful swellings already referred to and a sallow, jaundiced appearance to the skin, the physical findings remained the same until two days before death, when bronchopneumonia appeared in both lungs. Death came on the eleventh day after admission.

Treatment—Hot epsom salt compresses were used on the painful areas, with salicylates and codein sufficient to control pain. Daily doses of 1 per cent gentian violet were given intravenously for five days in these respective amounts: 1-15 cc., 2-15 cc., 3-20 cc., 4-20 cc., 5-25 cc.

Autopsy—Every part of the body examined was found saturated with pus. Multiple abscesses exuding pus were found in the soft tissues under the skin at the site of the swollen areas referred to above. Abscesses were also found in the mediastinum, lungs, pericardium, heart, spleen, liver, and kidneys. Smears from these tissues showed numerous small clusters of staphylococci, and microscopical study of the organs disclosed innumerable abscesses.

The pathological diagnoses were: purulent dermatitis, purulent pericarditis with effusion, acute myocarditis, empyema, and miliary abscesses of the spleen, kidneys, and liver. The cause of death was staphylococcus septicemia, probably resulting from her previous boils.

Comment—This case is typical throughout. The portal of entry was apparently an earlier furunculosis, a source which almost invariably leads to a fatal termination. The metastatic abscesses were unusually numerous and widely distributed. The low white count measured the fulminating type of infection. The absence of osteomyelitis is worthy of note.

CASE 2—R. C. This patient was seen by one of us (A. C. R.) on January 20, 1926, when his complaint was of a boil on the upper lip, with several enlarged glands below the jaw. He had chronically infected tonsil stumps, otherwise was normal. Mercurochrome was applied to the boil after free drainage. Nine days later he had a crop of small pustulations on the face, the anterior cervical glands were much enlarged and there was a painful, raised, tender, reddish spot on each knee. Temperature was 99.6 F. on February 1, similar spots were distributed well over the lower extremities, and the face and neck. On February 6, the lesions were maximal, temperature ranged between 99.4 and 101.6. Smears from the suppurating skin lesions showed pure staphylococcus and the white blood count was 10,900 with 73 per cent polymorphonuclears. The patient felt quite well. Blood cultures were not made. Treatment with mercurochrome applications and epsom salt compresses did not limit or control the skin lesions. Finally gentian violet, 1 per cent solution, was given intravenously in a 30 cc. dosage. The temperature came to normal, no new lesions appeared and no recurrence up to March 10, 1927.

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Frank E. Stiles (2197 Divisadero Street, San Francisco). M. D. Yale University, 1925; Ph. B. Yale University, 1920; University of Paris—Faculté de Médecine—Certificat, 1919. **Graduate study:** Fitzsimons General Hospital, United States Army, Denver, Colorado; St. Joseph's Hospital, Denver. **Previous honors:** United States Army Medical Department—First Lieutenant M. O. R. C.—Hospital duty, 1925-26. **Present appointments:** House physician Mary's Help Hospital, San Francisco. **Practice:** General.

- BEDSIDE MEDICINE FOR BEDSIDE DOCTORS -

An open forum for brief discussions of the workaday problems of the bedside doctor. Suggestions for subjects and discussants invited. Useful extracts from letters will be published.

UNDER WHAT CONDITIONS, IF ANY, IS APPENDICOSTOMY JUSTIFIABLE?

The Editor—When Wier's report suggesting the possibilities of appendicostomy reached Manila, it found surgeons John R. McDill, P. K. Gilman, and this editor so sorely tried by fatalities from amebiasis, about which but little was then known, that in appendicostomy we seemed to see new promise. I still retain a mental picture of the pleasure we had in demonstrating the technique of the new procedure and the follow-up method of irrigation to a largely attended meeting of the medical society. That mental picture was quickly spoiled by the chagrin of failures which, looked at from the point of view of our present knowledge, as indicated in this excellent discussion, might have been anticipated. But it must be remembered in extenuation that at that time the question of whether fluid introduced through the rectum ever reached the cecum was a highly controversial one.

As Gilman says and other discussants imply, the chief advantage of appendicostomy in amebiasis, when it did help, was probably due to easier treatment of lesions in the appendix or about its opening into the bowel, a service that is even more effectively rendered by removing the appendix. Appendicostomy, appendectomy or cecostomy, as all the discussants say, are now comparatively simple operations, but any of them may be far from simple when attempted in a severe mixed amebic and bacterial infection involving the cecum and appendix, of the kind still common in the tropics.

However, such conditions are so rarely seen these days that they would hardly require consideration in deciding to do the operation of appendicostomy, even were that operation as full of promise as it at one time appeared to be, which it isn't.

P. K. Gilman *—Fixation of the appendix in the abdominal wall and using it as a fistula for irrigation of the colon was first performed by Weir. This comparatively easy operation suffered a not uncommon experience of a new surgical procedure. Enthusiasts, ignorant of or ignoring the mechanical and physical fundamentals of the diseased region to be influenced, popularized appendicostomy. This popularity waned deservedly, the pendulum swinging too far, however, as it had previously swung too far in favor of the operation. While the indications justifying appendicostomy are comparatively rare, I feel that there is still a place for this therapeutic aid.

Introduced for purposes of lavage of the large

bowel and for the introduction of drugs we now know this purpose to be as readily accomplished by rectal administration. The x-ray has shown us that fluid injected from below promptly and completely reaches all parts of the large bowel. However, in certain intractable amebic infections of the colon where oral and rectal medication have failed, prompt improvement has followed an appendicostomy and the introduction of medicaments. This improvement may be due to the fact that the drugs reach the lining of the appendix in greater concentration than is possible by rectal administration and thus put a stop to reinfection of the large bowel from the appendiceal mucosa. Also appendectomy by removing this focus might have in these patients accomplished the same result as it did in others where removal was done instead of appendicostomy. Be that as it may, I believe in carefully selected patients with intractable amebic colitis appendicostomy is not troublesome but easily cared for as the normal direction of peristalsis toward the cecum and the valve-like character of the opening into the bowel prevent escape of cecal contents, while lavage through it is simple enough to permit the patient to carry this out.

In nonspecific colitis where the object is not lavage but rest of the colon by diversion of the fecal stream, the operation is useless. Similarly the operation fails when performed to allow lavage in chronic constipation. Here the effect is but temporary and possesses no advantage over properly performed colonic irrigations.

Charles Eaton Phillips—To judge the merits of a surgical procedure it must be considered from the angles: (a) Is it theoretically right? (b) Is it successful?

That a medicinal substance injected through the appendicostomy opening is more efficient than if injected per rectum is not theoretically sound. It certainly does not justify the performance of a major operation to bring it about.

The fundamental principles of treating infections of the colon must be rest, drainage, and cleanliness. Many patients recover without recourse to these severe measures and in them surgery is not indicated. When surgery is indicated it should be adequate.

In the June, 1925, number of CALIFORNIA AND WESTERN MEDICINE I laid down the following rules for the "surgical treatment of the diseases of the colon." Surgery is indicated in: (a) Acute infections of the colon which have not responded to the usual line of treatment and where the continuance of the disease threatens the life of the patient. (b) Chronic infections of the colon which have not responded to the usual treatment and which are so severe that a continuance of the disease may lead to stricture, malignancy or a serious interference with the general health. (c) In neoplasms of the large

* Philip Kingsnorth Gilman (350 Post Street, San Francisco). M. D. Johns Hopkins, 1905; A. B. Stanford, 1901. Graduate study: Johns Hopkins Hospital. Previous honors: Professor Surgery University Philippines, 1912-16; Chief Surgeon Philippine General Hospital, 1912-16; Lieutenant Commander U. S. N. R. Present hospital connections: Stanford University Hospital, Chief of Staff. Present scientific organizations: San Francisco County Medical Society, C. M. A., A. M. A., F. A. C. S., Pacific Coast Surgical Association Society. Present appointments: Clinical Professor Surgery, Stanford University Medical School; Lieutenant Commander U. S. N. R. Practice limited to Surgery since graduation. Publications: "Two Cases of Multiple Saccular Aneurysms of the Aorta with Rupture into the Pericardium," Johns Hopkins Hosp. Bulletin, May, 1904; "Dermoid Tumors of the Mouth," Surg. Gynec. Obst., June, 1916; "Report on First One Hundred Autopsies Philippine Medical School," Philippine J. Sc., 1908; "Cysts and Fistulae of the Thyroglossal Duct," Surg. Gynec. Obst., February, 1921; "Amebic Abscess of the Liver," California and West. Med., June, 1921; "Acute Suppurative Thyroiditis," California and West. Med., July, 1921; "Branchial Cysts and Fistulas," J. A. M. A., July, 1921; "Gall Bladder Disease Simulating Carcinoma of Stomach," Surg. Clin., North American, April, 1926; etc. etc.

intestine, where irritation is lessened by diverting the intestinal content.

It was only after a rather extensive experience with the operation of appendicostomy in the treatment of amebic infections that I abandoned it and limited surgical interference to cecostomy. Technically it is as simple and its efficiency is incomparably greater than appendicostomy.

The difficulties of repair are not great. Theoretically it is right and practically it accomplishes the purpose for which it is intended.

Appendicostomy is not theoretically or practically right and in my opinion there is no place for it.

Rea Smith *—The two indications usually given for appendicostomy are (1) irrigation for medication of the colon, (2) *bowel drainage* for rest or relief of obstruction.

It seems to me that there is no sound physiological basis for its performance for medication. The bowel is provided with a mechanism for peristalsis and reverse peristalsis, and if unobstructed, irrigation from the rectum will reach any part of the colon as easily as through the appendicostomy opening.

The patients who do not clear up after ordinary lavage and which seem to demand appendicostomy for medication of the colon are those with a partial obstruction in the ascending colon and a dilated, toneless cecum. If surgery is indicated, to my mind it should be directed toward the relief of the obstruction and restoration of the normal peristaltic waves, rather than opening the appendix. The tying of the cecum to the anterior wall by appendicostomy in itself interferes with the bowel's emptying and tends to produce a cecal stasis, so that after the appendicostomy has closed the patient is very likely to carry during the rest of his life a crippled cecum which fails to empty properly.

Cecostomy, in my opinion, is a much better operation than appendicostomy for the purpose of bowel drainage in instances of complete obstruction lower down, especially as a preparatory measure for a radical removal of the obstruction after relief of toxemia.

In short, I believe that appendicostomy for medication is an unnecessary procedure likely to be followed by rather serious complications, and that cecostomy is a better and surer operation for bowel drainage when that is indicated, so that I can see no surgical indication for its performance.

Harrison W. Jones *—Every operation performed should bring satisfaction to both surgeon

and patient. I have had a reasonably large experience with operative drainage of the intestinal tract and have used appendicostomy for both medication and drainage. The medical patient was one of amebic infection that had resisted all forms of medication by oral administration. I decided to fix the appendix in the abdominal wall, open it and thus administer medicine and irrigation directly. This treatment was continued religiously for three months with no apparent results. As a last resort I did an appendectomy and followed with oral medication which brought about a permanent cure at the end of four months.

My patients in whom appendicostomy or cecostomy was performed for obstruction are twenty-six. In five the appendicostomy was done for the purpose of drainage. None of them drained properly, and I had to resort to cecostomy in order to get sufficient drainage that my patient might make sufficient progress to make him at least a fair risk for a radical operation. In the remainder I did a cecostomy and have abandoned appendicostomy entirely and have been highly pleased with the procedure.

H. H. Searls *—The operation of appendicostomy is rarely indicated. A search of the records of the University of California Hospital shows but one patient on whom it was performed. A native of Tahiti, suffering from an aggravated and obstinate amebic dysentery, after many weeks of medical treatment, finally only gained relief following appendicostomy by Doctor Terry. Irrigation with quinin bisulphate and later with dilute thymol through the fistula thus established was followed by arrest of the severe dysentery and a corresponding improvement in the patient's general condition.

The modern trend of surgery, however, is away from the once popular operation of appendicostomy; cecostomy, permitting the introduction of a larger tube, being used in place of it, both for medication of the large bowel and for relief of low obstruction. For the latter condition appendicostomy is nearly always a failure. In such a condition as that found in the patient above cited I feel that appendicostomy is justifiable and indeed proved its value. It has one point in its favor over cecostomy in that termination of the fistulous tract by appendectomy is far easier than the closure of the cecostomy opening.

*** H. H. Searls** (170 Santa Ana Avenue, San Francisco). M. D. University of California, 1916; B. S. University of California, 1913. Graduate study: Resident surgeon, University of California Hospital, 1920-22. Previous honors: U. S. Navy, Medical Corps, 1917-20. Present hospital connections: Visiting surgeon, University of California Hospital. Present appointments: Assistant Professor of Surgery, University of California Medical School. Practice: General Surgery since 1922.

Smallpox is becoming increasingly rare on the European continent, the Health Section of the League of Nations finds. Most of the cases reported for 1926 (748) were in England.

The United States, however, had 27,000 reported cases during the same period, which has led the American Dermatological Association to adopt resolutions urging the enactment of universal vaccination regulations.

Sometimes we wonder what the anti-vaccinationists are thinking about when they claim sanitation "does it." Here is the leading country in the world in community and private sanitation, yet look at the number of cases of smallpox. Figures do speak.—Editorial, *Ohio State M. J.*

* **Rea Smith** (502 Medical Office Building, 1136 West Sixth Street, Los Angeles). M. D. University of Pennsylvania. Hospital connections: Hospital of the Good Samaritan, Methodist Hospital, Hollywood Hospital, California Lutheran Hospital, and Los Angeles General Hospital. Publications: "Intestinal Indigestion," *California State Medical Journal*, August, 1911; "Report of Twenty-Eight Cases of Tropical Abscesses of Liver," *California State Medical Journal*, July, 1912; "Ileocolostomy and Colectomy for Arthritis Deformans," *Journal A. M. A.*, August 28, 1915; "Some Observations Concerning Post-operative Complications of the Lane Short Circuit and Colectomy, Surgery, Gynecology, and Obstetrics," November, 1916; "Surgical Relief of Intestinal Foci of Infection in Cases of Arthritis Deformans," *Transactions of the American Medical Association*, 1922; "Relationship Between the Ileocecal Coll and Arthritis Deformans," Editorial in *Surgery, Gynecology, and Obstetrics*, December, 1922. Practice limited to Surgery.

* **Harrison William Jones** (Modesto, California). M. D. Ann Arbor, 1904; graduate of the Literary Department, Spring Arbor Seminary, Spring Arbor, Michigan. Graduate study: Surgery, Ann Arbor. Hospital connections: St. Mary's and McPheter's hospitals, Modesto. Present scientific organizations: Stanislaus County Medical Society, California Medical Association, A. M. A. Practice limited to Surgery since 1911.

EDITORIALS

THE PASSING OF A BELOVED PHYSICIAN

The death on the ninth of March of Dr. William E. Musgrave at his hospitable "Riverwood" home in the Santa Cruz mountains, removes a strong personality from the medical world, and brings our appreciation of a truly great man closer to us. The loss is not confined to the community in which he lived, nor even to the state of California, but will be felt throughout the nation, and will extend across the Pacific to the Philippine Islands where he labored for many years. Socially, he was known as a man of broad culture, of rare kindness and charm, an original thinker himself, as well as a generous interpreter of the ideas of other men. His large vision, his wonderful grasp of detail, his wide experience in institutional and organization work, his intense loyalty to the profession of medicine, made him an outstanding figure in American medical journalism. An ardent lover of the beauties of nature, animal life, the songs of birds, the flowers, the trees, the mountains and the winding streams all appealed to him as if a part of his own life and being. To him the ideals of his profession were sacred. He appreciated both the joy of life and the duty of life. The outstanding thought in his mind was for ways and means to make living sweeter and easier, to lift mankind in general to a higher and happier state.

In his philanthropic endeavors he was fortunate in having for associate his beloved wife, who interested herself intensely in his work and cooperated in every effort where she might prove helpful. Our hearts go out in deepest sympathy to Mrs. Musgrave in her supreme loss. May the memory of a devoted husband and of the happy years spent with him, and the knowledge that he had the love and esteem of many friends and admiring colleagues help to comfort and sustain her. To his funeral came intimate friends from far and near. He was laid to rest at "Riverwood" on a mound overlooking the beautiful waters of the San Lorenzo River, a spot he loved dearly.

Doctor Musgrave's father was one of the family of the same name of Edenhall, England. His mother's father was the Thomas recorded as Daniel Boone's compatriot. Her mother, who was a Hayes, was a close blood relative of President Hayes. He was born on the old Thomas homestead at Farmington, Tennessee, September 12, 1869, and lived in the vicinity during his early years. He attended public school there and, after graduation from the normal school, spent three years at the Haynes-McLean College, Lewisburg, Tennessee. His Doctor of Medicine degree was awarded by the George Washington University in 1901. His senior year was 1899, but on account of his absence in Cuba, Porto Rico and the Philippines, during the Spanish-American War, the degree was not conferred upon him until the year 1901.

For some years before his graduation in medicine he had been working in Washington, D. C., in

the laboratories of his preceptors, Surgeon-General Sternberg and Walter Reed. He was executive on the hospital ship "Missouri" during her conversion from a freighter to a hospital ship, and thereafter until the war was practically over.

He then went to the Philippines where he served as pathologist at the great First Reserve Hospital, and later with the Army Pathological Laboratory until civil government was established. He was "loaned" to the new civil government and helped to establish the first units of the government laboratories, which later became the Bureau of Science. When the medical school was established as the first unit of the University of the Philippines he was appointed Professor of Medicine and Chief of Clinics in the Philippine General Hospital. Later he became Dean and Professor of Medicine in the College and Director of Hospitals; and organized the subsidiary schools of Pharmacy, Dentistry, Veterinary Medicine, the Graduate School of Tropical Medicine and Public Health. He also converted the large School of Nursing into a University School and created graduate departments in that school. He was one of the founders and for one term the president of the Manila Medical Society and the Philippine Islands Medical Association, and was delegate from that association to the American Medical Association in 1905, and again in 1911. He was one of the founders and first secretaries of the Far East Association of Tropical Medicine. As chairman of the Government Committee that worked for three years on the problem of excessive infant mortality of the tropics he published an exhaustive report of eleven hundred pages.

In 1917, after more than eighteen years of tropical experience in research, administrative and clinical medicine, he returned to San Francisco in uncertain health. During the World War he held the rank of Captain in the Medical Corps. In San Francisco he reorganized the Children's Hospital and continued as its director for five years. In the meantime he was appointed director of the University of California Hospital, which he reorganized. He succeeded in taking over Hahnemann Hospital from the old Homeopathic Medical School and converted it into an industrial medicine hospital. St. Luke's Hospital was also drawn into the teaching group by a strong affiliation.

Meanwhile his health failing to sustain him in such strenuous work, he resigned and accepted the lighter position of secretary of the California Medical Association and editor of CALIFORNIA AND WESTERN MEDICINE. After two years he gave up the secretaryship, but continued as editor of CALIFORNIA AND WESTERN MEDICINE and contributed largely to the founding and editing of *Better Health*. He was for six years leader of the hospital betterment work in California. At the time of his death, and for two years prior thereto, he was president of the Santa Cruz County Medical Society.

Editorial work was congenial to him. He served for years as editor of the *Bulletin of the Manila Medical Society* and as associate editor of the *Philippine Journal of Science*. In 1900, with R. P. Strong, he did early work on bacillary dysentery. His lengthiest publication was his report on infant mortality of the tropics. He wrote several exten-

sive monographs, besides scores of special articles on amebiasis, trypanosomiasis and streptothricosis, and was awarded a medal at the Bombay International Congress of Tropical Medicine. These names, amebiasis and trypanosomiasis, were coined by Doctor Musgrave. He also wrote extensively on fluke infections, malaria, tropical neuritis, and hundreds of other essays and addresses, published in both scientific and popular magazines. He was a frequent contributor to the editorial columns of the *Journal of the American Medical Association*.

As chairman of the committee of arrangements for the San Francisco session he displayed marked executive ability and published *Medical California*, a souvenir number of the meeting. In 1923-24 he served as vice-president of the American Medical Association.

For many years Doctor Musgrave was recognized as a leader in the medical world. His views on the social, civil, and economic relations of physicians to the public had much to do in shaping and directing the policies of organized medicine. While an ardent advocate of free medical attention to the indigent sick, he pointed to the danger of indiscriminate charity and the consequent pauperization of the American public by opposing with all the might of his facile pen every tendency toward socialized medicine.

Doctor Musgrave did more than any other man to place the medical profession of California in the forefront of medical associations throughout the country. He brought our state journal to such a high plane of quality that it bows to no other similar medical publication in America. It is a monument to the man who did so much to give it both form and substance. His ideals were in keeping with the best traditions of our calling, and no sacrifice was too great for him to make in order to maintain a high standard of excellence in whatever work he undertook. As a leader of men he pointed the way by directing our mental activities toward the investigation of vital problems; in solving which he himself in his own researches demonstrated beautifully the finest use of the scientific method. His contributions to the betterment of the profession remain an inspiration to his colleagues and give an additional value and zest to life.

Few men, even in the medical profession, though intimately acquainted with Doctor Musgrave, knew of his great versatility and accomplishments in the field of literature and scientific research. His modesty in reference to what he himself had done has become apparent since his death, as indicated by a careful perusal of his bibliography. Naturally what Doctor Musgrave has done for the good of humanity will be compared with the work of others in the profession who have passed to the Great Beyond. Such a comparison will be most favorable to Doctor Musgrave's record of achievements and will place his name in the forefront of those who have labored for the advancement of science in its service to mankind.

"The noonday never knows
What names immortal are;
'Tis night alone that shows
How star surpasseth star."

"PAPA SPANK"

Physicians are regulated, instructed, overruled, criticized; often punished by regulations, initiated and enforced by nonmedical departments, boards, bureaus, directors of this and that agency of government to an extent rarely appreciated. The maximum legal dosage of several important medicines is fixed for them by persons who are innocent of even a smattering of knowledge of the requirements. From the scores of nonmedical government agencies, there flows a constant stream of criticism of doctors, paid for at government expense. The gist of much of this tax-paid propaganda is to the effect that "the average doctor" is incompetent or dishonest, largely because he resents having his judgment as to what is best for his patients overruled by nonmedical bureaucrats and also because he usually fails to "cooperate" with these bureaus by reporting the most intimate frailties and misfortunes of his patients so that they may be made matters of government record.

This net of control over doctors by those who make and enforce laws is being drawn tighter and tighter. It has now reached a point where no physician can practice his profession honestly, intelligently, and protect the interests of his patients without very frequent violations of law and probably daily violations of the orders and instructions of bureaucrats that have the force of law.

Still "regulation," restriction, and thou-shall-not edicts keep pouring out from government printing presses.

A new one, and particularly bold, is shown in the following quotation (italics ours) from the last annual report of the Industrial Accident Commission of California:

"For many years it has been the unchanging opinion of the medical profession that hernias are not of traumatic origin in the sense that they are rarely the result of a single strain or injury but, rather, are caused by the successive strains to which the physical body is subjected in the ordinary course of living. Within the last two years the Commission, with its experience acquired in this field, reached the conclusion that the medical profession was not entirely correct in its position on this question."

Contrast this conclusion, arrived at by a commission of three laymen who know nothing about medicine or hernia, but which nevertheless sets medical judgment aside, with the following dignified medical statement by Morton R. Gibbons, Medical Director of the Commission (but not a member) published in the same annual report:

"In the case of hernia it must be assumed that (1) a predisposition existed, or (2) a hernia, known or unknown to the workman existed, or (3) some extremely serious injury or strain intervened to produce the disability. In the latter instance it is easy to decide. In the first instance the character and degree of injury must govern the decision. The claimant should generally be compensated in proportion to the severity of the cause.

"In the second instance we must decide whether or not an aggravation has been caused by industrial strain. If aggravation has occurred from industrial strain by injury, then the degree of strain or injury will govern the extent of compensation."

However, it is not the commission's ruling that makes their diagnosis humorous, silly or plain stupid, but it is the fact that a bureau of three laymen conclude "from their experience" that the medical pro-

fession is wrong in its opinions; and it is this laymen's diagnosis that has the full force of law.—W. E. M.

EDITORIAL ANNOUNCEMENT

The death of Dr. William Everett Musgrave, whose editorial management of CALIFORNIA AND WESTERN MEDICINE played so large a part in its recent development, placed upon the Council of the California Medical Association the necessity of carrying on this work.

The Council, at its meeting on March 19, decided that Dr. George H. Kress of Los Angeles and Dr. Emma W. Pope of San Francisco should be placed in charge as editors.

An editorial committee with power of general supervision, consisting of the president, the president-elect, the chairman of the Council, and the two editors was also appointed.

This Convention number of CALIFORNIA AND WESTERN MEDICINE is practically what our late editor had outlined. The general editorial and other policy of CALIFORNIA AND WESTERN MEDICINE will be along the lines laid down by its late editor.

O God, who dwellest not in houses built by hands, but revealest Thyself in the lives of men and women who serve the world, hallow with Thy blessing this building reared for the fellowship of those who minister to the health of bodies and of minds. Let Thy blessing rest upon all who planned and all who labored to erect this edifice, and upon those who shall direct its use. Foster here both the science and art of physical well-being. May those who meet within these walls help each other to understand the causes and cure of disease, to be skilled in safeguarding and increasing public health, and to aid mankind to attain greater vigor for their work and play.

Grant that this Academy of Medicine rich with the memories of physicians and surgeons honored and loved in their generations, may uphold the standards and traditions of a high calling, and inspire its members with open-mindedness to truth, diligence in study, courage in the discharge of duty, reverence for those they serve, and unselfish devotion to their welfare. In the midst of this wealthy city, enable these servants of humanity to remain untainted by sordid ideals, and by their life and work to assist in leavening the community with the spirit of the Son of man who came not to be ministered unto but to minister, and who set men free from ills of the flesh and spirit that they might share His own abundant life. Amen.—Dedicatory prayer (Rev. Dr. Henry Sloane Coffin), *The New York Academy of Medicine*.

The America of 1927 is a nation being fed a standardized education from standardized textbooks by teachers so standardized that a breach of the conventions of doctrine may lead to penalties; a nation to which a syndicated press hands out standardized opinions, a standardized philosophy of living and loving, standardized jests, comic strips, and stories, with the precision that the manufacturer supplies it with ready-made clothing cut to a standard length and dyed to a standard color; a nation in which labor saving devices, and telephones, and automobiles are undermining the stanchions of individuality by wiping out isolation and so standardizing experience. What, they ask, lies before such a country but a regimen of living and thinking in which no man differs from his neighbor, a civilization rendered colorless and flavorless through uniformity, and inert through similarity of ideas?—*Saturday Review of Literature*.

After the service one of the members said to him: "Pastor, what am dis heah 'status quo'?"

Gathering his wits together, the pastor replied: "Well, dat am de Latin fo' de mess we's in."

MEDICINE TODAY

Current comment on medical progress, reviews of selected books and periodic literature, by contributing editors.

Disease Prevention

DIPHTHERIA History—A new chapter in the history of medicine upon the subject of diphtheria has been outlined by the introduction of toxin-antitoxin immunization. The prompt recognition of its importance by the medical world is a pleasing commentary upon the receptivity of the physician of today in comparison with that of his predecessors of not many generations past. It remains to be seen how long it will take for a unanimous conviction upon the part of scientific men to create a public sentiment which shall demand a universal application of this agency which through its use promises a complete eradication of diphtheria.

Lessons may be drawn from the history of artificial immunization against smallpox. The charming and accomplished Lady Mary Whortley Montague introduced inoculation with mild smallpox to the European world. She wrote from Constantinople about smallpox clinics:

"People send to each other to know if any of their family has a mind to have the smallpox; they make parties for this purpose, and when they are met (commonly fifteen or sixteen together) the old woman comes in with a nutshell of the best sort of smallpox and asks what vein you please to have open. She immediately rips open what you offer to her with a large needle (which gives no more pain than a common scratch) and puts into the vein as much matter as can lie upon the head of her needle, and after that binds up the little wound with a hollow bit of shell, and in this manner opens four or five veins."

After ten years of great opposition inoculation became firmly established in England and was extensively practiced up to 1800. While the death rate from smallpox had been one out of every three or four persons attacked, it was a matter of congratulation that from the inoculated disease the rate of mortality was not greater than one out of fifty and sometimes as low as one out of three hundred (?).

In 1798 Jenner announced his discovery of vaccination and in 1840 Parliament abolished inoculation. Modern sensibilities are shocked to remember that up to the beginning of the Civil War slaves who did not show upon their faces the traces of smallpox brought a much lower price on the auction block than did those who were pock-marked, but today a truly remarkably complacent civilization allowed the following thing to happen: During the six years ending with January 1, 1926, 28,592 cases of smallpox were reported in California. Ninety-four per cent of these individuals had never been vaccinated.

Parallel history of the control of diphtheria is being much more rapidly written than has been that of smallpox.

Quickly following the suggestion of Theobald Smith and the practical test of Von Behring, Parke used toxin-antitoxin immunization in the institutions for children in New York City and thereby put a

stop to the more or less extensive outbreaks of diphtheria which in spite of all precautions had occurred from time to time. This together with the substantial results reported from Auburn, N. Y., and New Haven, Conn., were sufficient to impress upon health authorities a new responsibility and a crystallizing opinion is emphasizing nowadays more and more the protection of children before 18 months of age and at the latest, prior to the time of school attendance.

The leading pediatricians of the larger cities of the Pacific Coast are rapidly immunizing children within their sphere of influence. It remains to be seen how rapidly others in the profession will follow their example.

GEORGE E. EBRIGHT,
San Francisco.

Dermatology and Syphilology

SCHAMBERG and his coworkers using various gold compounds, particularly gold and sodium thiosulphate, have been able to demonstrate a decidedly curative effect, and a prolongation of life, in cases of experimental inoculation tuberculosis in animals.¹ More recently² they have obtained truly excellent results in the treatment of lupus erythematosus by means of intravenous injections of gold and sodium thiosulphate. This dermatosis, most cases of which Schamberg regards as tuberculous, is notoriously resistant to treatment. Therefore a remedy with positive value is very welcome.

H. J. TEMPLETON,
Oakland.

Gastrointestinal Disorders

ACHYLIA—The recent appearance of an article entitled "The Clinical Significance of Achylia Gastrica"³ again stimulates thought regarding a subject frequently lost sight of owing to the fact that examination of the gastric contents is rarely routine for patients with gastrointestinal complaint coming before the average physician.

The first premise in discussing achylia is to definitely decide what constitutes this condition. The conclusion universally adopted is the absolute lack of any hydrochloric acid in the gastric contents at all times. Along with this absence must also be the corresponding lack of ferments. To disclose the absence of acid and ferments in the secretion a definite routine must be followed. Even today many physicians continue to use the old single test of extracting the gastric contents at one hour after the test meal with the large Ewald tube. The absence of hydrochloric acid in this test has caused many diagnoses of achylia when better tests later showed the presence of an abundance of acid. The fractional method of studying the gastric content as developed by Rehfuess⁴ always should be used to the exclusion of the single test. Only by a study of

the stomach content every fifteen minutes from the fasting period through two hours of the digestive period will the true condition be revealed. If no hydrochloric acid is found up to the first hour it may appear during the second hour. Thus a "psychic" secretion due to apprehension in facing the test is replaced by the "chemical" secretion in the second hour.

With findings warranting the diagnosis of achylia gastrica the problem is to determine the cause and its significance. Friedenwald and Morrison find two types of achylia: (1) primary where the total acid is very low, and (2) secondary where the total acid is much higher. In the first type several members of the same family may have achylia and the condition may be found in the first two decades. The second type follows various depleting conditions such as acute fevers, malignant tumors, and anemias. The authors have rarely found a return to normal secretion when true achylia has been demonstrated. Such findings appeared in neurasthenics.

The fact that true achylia has been found in patients who develop pernicious anemia opens a subject for discussion as to its bearing on the anemia state. Such a discussion introduces a large amount of evidence that needs individual consideration.

There are three classes of patients in whom these authors find achylia. Those of the first group have no gastrointestinal symptoms and are apparently in good health; those of the second have a greater or less number of gastric symptoms, while the third group have slight or no gastric symptoms but have marked intestinal disturbances.

The largest number of patients appear in the second group, in whom the condition appears more frequently between the ages of 30 and 60 years and is more common in females than males.

ELDRIDGE J. BEST,
San Francisco.

Ophthalmology

INCIPIENT Cataract—An effective method of checking the progress and removing the opacities in a beginning cataract has been long sought. Various remedies have been used, and good results reported. Green¹ reported 58 per cent and 25 per cent arrested by the use of mercury cyanid injections. Franklin and Cordes² reported 84.3 per cent improved by the use of radium. Harkness³ reports sixteen patients treated with milk injections and was disappointed with the results. He sent out questionnaires to forty teachers of ophthalmology in Class A medical colleges; the great majority of these teachers do not think that any known remedy is of any service except the removal of foci of infection and improvement of the general physical conditions; a few believe that they have had good results from medical treatments including dionin, iodine therapy, locally and internally, with dietetic supervision, the removal of the foci of infec-

1. Arch. Derm. and Syph., Vol. 14, No. 1, p. 43.

2. Arch. Derm. and Syph., Vol. 15, No. 2, p. 119.

3. Friedenwald and Morrison: Annals of Clinical Medicine, 1926, Vol. No. 4, p. 319.

4. Rehfuess: J. American Medical Association, 1914, 63, p. 11.

1. Green, A. S. and L. D.: American Journal of Ophthalmology, 1919, Vol. 2, p. 423.

2. Franklin, W. S., and Cordes, F. C.: American Journal of Ophthalmology, 1920, Vol. 3, p. 643.

3. Harkness: American Journal of Ophthalmology, 1925, Vol. 8, No. 2, p. 132.

tion and the improvement of the general metabolism. As Harkness says, the slitlamp will prove of value in studying lenticular changes, and thus enable us to institute treatment before there is loss of vision or changes that we can detect by the ophthalmoscope. It will at least tell us whether we are dealing with a purely senile type or a complicated cataract.

Davis,⁴ who claims to have had twenty-three years of experience with lens antigen, and five years in the treatment of incipient cataract, and with it having treated over 250 patients, in 85 per cent of whom the progress was checked. The lens antigen is most effective in the ordinary subcapsular type, while it has little or no effect on the nuclear type. Diabetic cataracts are favorably influenced. Heart disease, high blood pressure, and diabetics are not contraindications to treatment. Every refraction should be made with the pupils dilated, and a careful examination of the lens made at the same time. Should lens changes be present, treatments should be begun at once.

Anaphylactic shock has been of extremely rare occurrence and of light form since subcutaneous rather than intravenous methods of injections have been used. A sensitization test is the first given, and the reactions following the therapeutic injections are carefully noted during the course of the treatment. When the reaction to the sensitization test is very marked, as noted by the swelling and redness at the site of the injection, the therapeutic injections should be given with special care. Symptoms that the patient is reaching his toleration limit are manifested by uneasiness, restlessness, dull headaches, or dizziness.

Davis prepares his own lens antigen from fresh beef eyes; the protein content of the solution is about 2 per cent. Fifty doses constitute a course of treatment given over a period of two months. It will be interesting to watch the results of reports from other investigators.

WILLIAM A. BOYCE,
Los Angeles.

Pediatrics

SUGGESTIVE Developments in Heliotherapy—Much evidence is being accumulated indicating the value of sunshine in the prevention and treatment of certain conditions.

Alfred Hess¹ and L. R. De Buys,² and others, using rats which are very susceptible to rickets for experimental studies, have shown how calcium is deposited in the bones under the influence of appropriate light rays, thus curing rickets; and that the phosphorous of the blood serum is increased even when the diet was deficient.

In these experiments the rays used were those of the carbon arc lamp, the air-cooled quartz lamp, or

the direct rays of the sun. The two first types, because of ready accessibility at all times and in any surroundings, were most satisfactory. The quartz lamp is considered to be about thirty times as effective as direct sunlight. Pigment in the skin of colored people, or fur as in black rats, caused a slowing up of the action of these rays or even a complete inhibition of their action when the same dosage was used as for unpigmented skins and white-furred animals. De Buys'³ findings that rickets is just as prevalent among colored infants in the South as among the whites, whether in the country districts or the city, and with similar diets, seem to support the experimental evidence.

The action of the sun's rays is, of course, inhibited by dust and smoke in the air, hence the greater tendency to sunburn when on mountain trips, or when on the water in an open boat. To get the best results from heliotherapy there must be very little foreign matter floating in the air. Also window glass, because of the lead it contains, cuts out valuable ultra-violet rays. This explains why the sunshine streaming in through window glass, while it is warming, has no curative or bacterial power other than drying.

That diseases other than rickets are benefited by the sun's rays, is shown by the work of Rollier on bone, glandular and peritoneal tuberculosis.

Hess⁴ has irradiated a nursing woman by means of the quartz light and "brought about a marked increase in the antirachitic potency of her milk." He also suggested that this would prevent the nursing infant from having rickets and at the same time conserve the mother's own calcium and phosphorous. These findings suggest the advisability of letting the nursing mother have as much out-of-door life as possible, particularly in the direct rays of the sun, with the hopes of developing the antirachitic properties of the breast milk. Aiding in the conservation of the calcium and phosphorous by exposure to direct sunlight or artificially produced heliotherapy, may decrease the loss of teeth in the pregnant woman and possibly conserve her store of lime. The thought is enticing and it seems well worth future study.

A. J. SCOTT, JR.,
Los Angeles.

Physical Therapeutics

IT is gratifying to read¹ in the February issue of CALIFORNIA AND WESTERN MEDICINE, A. B. Hirsch's observations on the pioneers in physiotherapy. The physician who has failed to utilize the physical therapeutics when indicated has deprived himself of valuable facilities. When the American Medical Association published the report of the committee on present status of physical therapy after the² establishment of the Council of Physical Ther-

4. Davis: The Year Book, 1926, p. 132.

1. Hess, Alfred F., and Unger, L. J.: Interpretation of Seasonal Variation of Rickets, Journal American Medical Association, lxxvii 39, July 2, 1921.

2. De Buys, L. R.: Rickets, Illinois Medical Journal, Vol. 47, No. 6, p. 413, June, 1925. (Note extensive bibliography.)

3. De Buys, L. R.: Trans. American Pediatric Society, Vol. xxxiii, 1921, p. 160. (Discussion.)

4. Hess, Alfred F.: Weinstock, Mildred; Sherman, Elizabeth: Antirachitic Properties Developed in Human Milk by Irradiating the Mother, Journal American Medical Association, 88, 24, January 1, 1927.

1. California and Western Medicine, 2, 1927, p. 242.

2. J. A. M. A., 10, 24, 1925.

apy, convincing evidence concerning these physical agents became available to the physician whose ethical ideas heretofore had limited him to drug therapy. For the benefit of those unfamiliar with the progress in the scientific and ethical interpretation placed on these methods in medical practice, the following is quoted.³ "Physical therapy is a term employed to define the treatment of disease by various nonmedical means." It comprises the use of the physical, chemical and other properties of heat, light, water, electricity, massage, and exercise. There are certain definite indications for the use of some one or a combination of several of these physical agencies in the treatment of diseases, but to depend on these agencies solely, to use them in lieu of better proved methods, or to employ them without having first thoroughly studied the patient from the standpoint of diagnosis, is harmful practice. Some physical agencies may be used on the theory that "they will do no harm and may do some good." The psychologic element in their use impresses the patients, usually beneficially but occasionally to his detriment. The use of a certain method may become a habit with the patient, the physician or the technical assistant, so that the course of treatment is prolonged unduly. Again, manufacturers' agents—salesmen absolutely untrained in medical science—visit physicians, extolling the virtues of special physical apparatus, making unfounded claims as to curative values, and emphasizing the "money-making powers of these methods of treatment." In the above statement are facts, not fancies for consideration, but a practical knowledge must be acquired if the employment of physical agents are to be beneficially prescribed. Adequate hospital service must include a properly equipped physical therapy department with a physician in charge just as it maintains its clinical laboratories and roentgenological department. In the latter departments the directors interpret the medical findings largely for diagnostic purposes, while the director of physiotherapy must advise and supervise the application of the various physical procedures in a scientific and rational manner. Physical treatments must be measured by their effect. Physicians and patients have been discouraged and disappointed by poorly advised or administered physical therapy treatment. Norman Titus⁴ draws "attention to the fact that by far the greatest part of physical therapy is medical common sense. An understanding of the pathology and of reaction desired in the patient can be called the common sense part. Three per cent of physical therapy is technical knowledge of whether the modalities can be applied effectively, conveniently, and with safety to the part to be treated and how those modalities will work when brought into play. Two per cent of physical therapy is the actual knowledge of the technique. Therefore, the common sense part of the subject is 95 per cent." With the growing recognition of the part physical therapy plays in general therapeutics and a better understanding of efficient administration of the various physical agents, more extended use is being made of them by physicians.

HARRY LESLIE LANGNECKER,
San Francisco.

3. J. A. M. A., 10, 16, 1926.

4. American Journal of Surgery, July, 1926, p. 15.

Proctology

TREATMENT of Rectal Prolapse of Infants and Children—To the parent, rectal prolapse in infants and young children is terrifying; to the physician it presents a situation calling for utmost ingenuity. Replacement is not usually difficult. Temporary retention with an adhesive strap in front of the anus gives temporary relief.

More permanent success demands correction of such irritative conditions as diarrhea, proctitis, or polypus; also the prevention of undue straining at stool, due to constipation. Defecation had best be in a recumbent position and often manual support of the perineum is necessary.

If this régime is faithfully carried out for a considerable period the tonus of the anal sphincter returns and the prolapsing tendency ceases. As Heald¹ has stated, however, such treatment is irksome, disagreeable, and often impossible. Despite faithful and intelligent care the child, by crying and straining, may cause a recurrence of the prolapse, thereby negating previous efforts. In fact in most cases of considerable standing conservative methods are doomed to failure.

Heald¹ suggests a simple operative procedure consisting of replacing the prolapse in the etherized patient and then, through a speculum, after disinfecting the mucosa with mercurochrome, introducing two coarse silkworm gut sutures from within outward. The upper suture comes out with free ends on a level with and on each side of the sacrococcygeal notch. The second is one-half inch lower. They are tied over a compress and removed in two weeks.

The patient is in bed for three or four days, and bowel movements are prevented by an opiate and are later restored by an olive-oil injection. The results have been excellent both as to operative morbidity and final cures.

This method seems to be an independently evolved modification of the technique of Ekehorn,² further described by Tolken,³ the end results of which have been discussed by Petren.⁴ These Scandinavians use a single suture of heavy silk drawn out on each side of the lower end of the sacrum by a special mounted needle introduced into the rectum from the skin, under guidance of a finger inserted through the anus. The needle, being brought out through the anus, is threaded and withdrawn and the act repeated on the other side.

I have had eminent satisfaction with Ekehorn's method. It has not been necessary or possible to keep these children from brisk activity following the operation. No effort is made to prevent regular bowel action. There is always a slight fever. The results have been perfect.

This method of suspension is worthy of consideration in all young patients with severe or recurring prolapse and particularly if means are not at hand for faithful adherence to nonoperative treatment.

GORDON F. HELSLEY,
San Francisco.

1. Heald, C. L.: Surgery, Gynecology, and Obstetrics, Vol. 42, June, 1926.

2. Ekehorn, G.: Arelun. F. klin. Chir., Vol. 89, 1909.

3. Tolken, R.: Deutsche med. Wochenschr., 1915, No. 15.

4. Petren, G.: Acta Chir. Scand., Vol. 59, 1925.

Tuberculosis

IS tuberculosis in the adult usually the result of infection in childhood or is it caused by exogenous reinfection in later life? This is a question of more than academic interest, for upon its answer depends the solution of many problems which the physician must meet.

At the fifth conference of the International Union Against Tuberculosis, Washington, September 30, 1926, Lawrason Brown¹ stated: "There are three camps of those who consider this problem: 1. Those who believe that all tuberculous infection arises from childhood infection. 2. Those who believe that most cases in adult life are due to reinfection from without. 3. Those who hold that both endogenous and exogenous reinfection can occur."

It is well known that all children become infected with tubercle bacilli before the fifteenth year, the fortunate ones picking up a few germs here and there and very likely acquiring an immunity by this crude form of vaccination. Those who are in close association with a tuberculous relative may receive massive doses of the infection, and if they do not succumb are likely to develop the disease in later life.

If this development is due only to endogenous reinfection and if adult infection is practically impossible, the problem of the war against tuberculosis becomes greatly simplified. Protect children from close association with tuberculous individuals, allowing them only the casual contacts which are inevitable, and we shall in time become a race of immunes.

If adult reinfection from the outside plays a large part in adult tuberculosis it is difficult to see how the disease ever can be eradicated.

The necessity of isolating all tuberculous patients; the disastrous phthisiophobia that would result and the inevitable concealment of many patients would make this task impossible of accomplishment. Unfortunately animal experimentation offers no answer to this question. Tuberculosis is a lifelong disease and a lifelong problem greatly modified by human social conditions. No animal exactly compares to man in his physical reactions, and his social conditions of occupation, environment, and exposure to intercurrent infections cannot be duplicated. The careful correlation of our clinical observations and the application thereto of a balanced and critical judgment offer the only hope of a decision.

The rarity of marital tuberculosis is the most convincing observation in favor of endogenous reinfection. Every physician knows how rarely husband and wife are both affected. Statistics place the figure at 3 or 4 per cent.

If close association of the average adult with a tuberculous consort continued over many years does not result in infection it is difficult to see what argument can be brought up in favor of adult infection

and against the conviction that the solution of the tuberculosis problem will be found in the protection of the child.

LEWIS SAYRE MACE,
San Francisco.

Tuberculosis

(Continued from March issue)

IN the opinion of Krause¹ tissue allergy is a defensive and conservative process, the prompt inflammatory response serving to prevent the spreading of tubercle bacilli in the body as occurs in the nonallergic animal. This prompt response to the presence of the tubercle bacilli after infection has been once accomplished is accompanied by systemic symptoms of acute and even dangerous illness.

From the eruption of a focus or the mobilization of variable numbers of bacilli from foci there would result unrestrained dissemination of infection but for the allergic response. The inflammation which accompanies it tends also to stimulate the powers of nodular tubercle to form fibrous tissue, thus preparing the way for the slow (chronic) tubercle formation after the acute stage is past.

Tuberculous formations may therefore be looked upon as being composites of the effects of lipoids and proteins of the tubercle bacilli, and representing a mixture, in varying proportions, of the effect of nodular tubercle formation and allergic inflammatory reaction. The disease tuberculosis is based upon the extension and progression and repetition of tuberculous formations, produced because of the presence of living bacilli. Destructive processes, such as necrosis and cavitation, may involve the foci when sufficient concentration of the protein released by the bacilli living and disintegrating within it is reached.

Larger nodular tubercles are built up mainly from the coalescence of smaller ones. Necrosis of tubercle is a result of allergy—a sequel of the inflammatory reaction. It begins centrally and extends outward. Fibrosis is brought about through the conversion of epitheloid cells of nodular tubercle into fibroblastic types. It is greatly enhanced by the allergic inflammatory reaction as the latter subsides. It begins at the periphery and extends inward.

The ultimate issue of every tuberculous focus turns upon the balance struck between central necrosis and peripheral fibrosis.

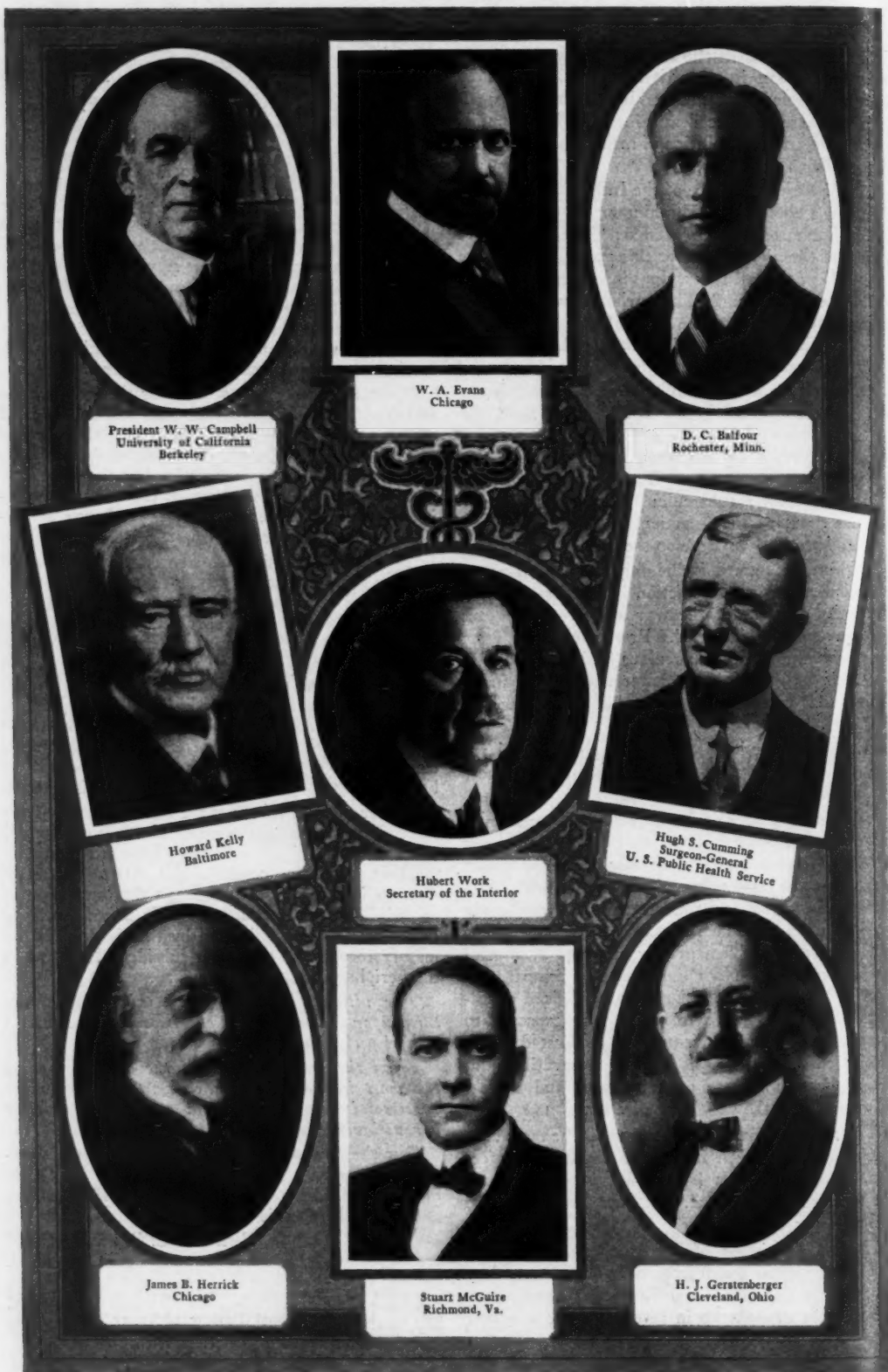
From the point of view of the bodily economy the most important single element of tuberculous processes is the integrity and competence of their fibrous investments.

Our therapy today is aimed at the fibrous investment of tubercle, striving to strengthen it. Other lines of exploration are suggested as possibly leading to further therapeutic aids.

CHARLES C. BROWNING,
Los Angeles.

1. Brown, Lawrason: Exogenous Reinfection in Pulmonary Tuberculosis, *The American Review of Tuberculosis*, January, 1927, p. 40.

1. Allen K. Krause, Associate Professor of Medicine and Director Kenneth Dows Laboratories, Johns Hopkins University; Editor *National Review of Tuberculosis*; Associate Editor *Journal of the Outdoor Life* (Address on the Anatomical Structure of Tubercle from Histogenesis to Cavity. Read before the Fifth Conference of the International Union Against Tuberculosis at Washington, October 1, 1926).



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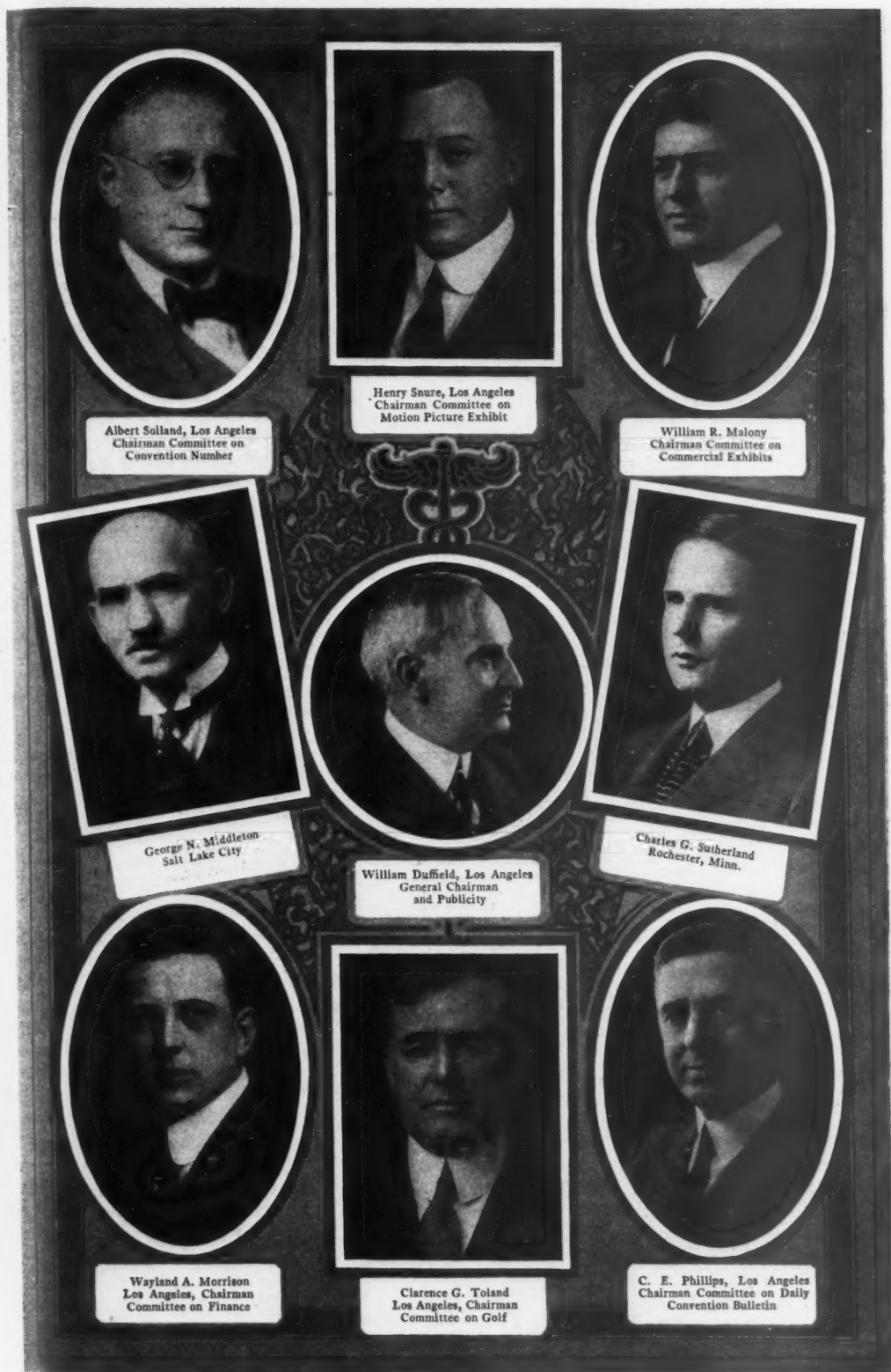
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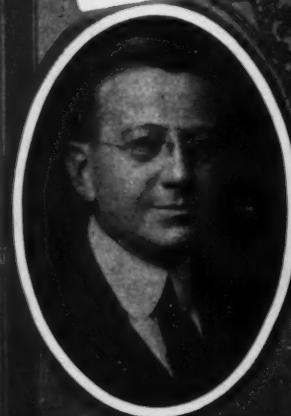
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Radiology

SECTION OFFICERS

House of Delegates

FIRST MEETING

Music Room, Hotel Biltmore, April 25, at 8 p. m.
Open to Members of the California Medical Association

ORDER OF BUSINESS

1. Call to order.
2. Roll call.
3. Report of President William T. McArthur.
4. Appointment of the Reference Committee by the President.
5. Report of the Council, Morton R. Gibbons, acting chairman (presented before the General Sessions).
6. Report of the Committee on Scientific Program, Emma W. Pope, chairman.
7. Report of the Auditing Committee, Morton R. Gibbons, chairman.
8. Report of Secretary Emma W. Pope.
9. Report of the late Editor, W. E. Musgrave.
10. Report of the General Counsel, Hartley F. Peart.
11. Unfinished business.
12. New business.
13. Reading and adoption of minutes.
- Adjourment.

HOUSE OF DELEGATES MEMBERSHIP

William T. McArthur, Los Angeles, President.
Froy T. Phillips, Santa Cruz, President-Elect.
Robert V. Day, Los Angeles, Vice-President.

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Lyell C. Kinney, San Diego (1927).....First District
William H. Kiger, Los Angeles (1929).....Second District
William H. Bingaman, Salinas (1929).....Third District
Fred R. DeLappe, Modesto (1928).....Fourth District
John Hunt Shephard, San Jose (1929).....Fifth District
Walter B. Coffey, San Francisco (1929).....Sixth District
Oliver D. Hamlin, Oakland, Chairman (1929).....Seventh District
Junius B. Harris, Sacramento (1928).....Eighth District
Henry S. Rogers, Petaluma (1929).....Ninth District
Robert Peers, Colfax (1928).....At Large
Joseph H. Catton, San Francisco (1929).....At Large
George H. Kress, Los Angeles (1929).....At Large
Harian Shoemaker, Los Angeles (1929).....At Large
Morton R. Gibbons, San Francisco (1927).....At Large
Charles L. Curtiss, Redlands (1929).....At Large

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Daniel Crosby
J. K. Hamilton
S. V. Irwin
H. B. Mehrmann
C. H. Miller
Gertrude Moore
D. N. Richards
Edward N. Ewer
C. L. McVey
George McClure
Henning Koford
R. T. Sutherland
Frank Baxter
J. W. Sherrick
W. B. Allen

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Dan H. Moulton
Edward E. Baumeister

Contra Costa County (1)
J. M. McCullough
L. St. John Hely

Fresno County (2)
Thomas Madden
Harry Craycroft
W. G. Millholland
A. E. Anderson

Glenn County (1)
George McKinnon
John N. Chain

Humboldt County (1)
F. A. Hamlin
J. K. Smith

Imperial County (1)
J. F. Davis
S. M. Sproat

Kern County (1)
F. A. Hamlin
J. K. Smith

Lassen-Plumas County (1)
J. F. Davis
S. M. Sproat

Los Angeles County (30)
W. Max Fearon
Michael Creamer
Lyle McNelle
William Duffield
John V. Barrow
F. E. Settle
C. G. Toland
Albert Soland
Joseph M. King
W. W. Hutchinson
Granville MacGowan
L. D. Remington
C. E. Phillips
George L. Cole
A. C. Germann
A. B. Cooke
A. E. Belt
Walter F. Wessels
E. C. Fishbaugh
R. S. Cummings
Charles Salisbury
W. H. Bucher
T. J. Orblson
William H. Daniel
Walter A. Bayley
Phil Boller
J. C. Horton
H. M. Voorhees
C. F. Sebastian
E. G. Goodrich
J. N. Van Meter
William Bowman

SECOND MEETING

Music Room, Hotel Biltmore, April 27, at 8 p. m.
Open to Members of the California Medical Association

ORDER OF BUSINESS

1. Call to order.
2. Roll call.
3. Announcement of the place of meeting, 1928.
4. Election of officers:
 - (a) Election of president-elect.
 - (b) Election of vice-president.
 - (c) Election of councilors.
- First District—Incumbent, Lyell C. Kinney, San Diego (1927).
- Eighth District—Incumbent, Junius B. Harris (1928).
- Councilors at Large—Incumbent, Morton R. Gibbons, San Francisco (1927).
- (d) Election of member on Program Committee (four years)—Incumbent, F. M. Pottenger, Monrovia (1927).
- (e) Election of Delegates and Alternates to A. M. A.—Incumbents:

Delegates		Alternates
Dudley Smith	(1927)	Walter B. Coffey
Oakland		San Francisco
Albert Soland	(1927)	C. F. Thomas
Los Angeles		Los Angeles
Robert Pollock	(1927)	Martha Welpton
San Diego		San Diego

5. Report of Reference Committee.
6. Presentation of president.
7. Presentation of president-elect.
8. Reading and adoption of minutes.
- Adjourment.

DELEGATES

ALTERNATES

Los Angeles County (30)—Continued

Russell Sands	Roy Thomas
W. H. Gilbert	Henry Shaw
F. S. Dillingham	William Molony
Edward W. Hayes	W. J. McKenna
Philip Stephens	Sterling Pierce
Leroy B. Sherry	C. H. Weaver
Pitch C. E. Mattison	John W. Crossan
William A. Swim	Paul Ferrier
John H. Breyer	Raymond G. Taylor
James F. Percy	Karl Dieterle
Elmer E. Kelly	J. G. Lynch
Foster K. Collins	A. E. Gallant
Eleanor Seymour	Sven Lokrantz
Irwin C. Sutton	Gerald F. Smith

G. M. Landrock **Marin County (1)**
J. H. Kuser

Raymond A. Babcock **Mendocino County (1)**
Lew K. Van Allen

A. S. Parker **Merced County (1)**
W. E. Lilley

Wyllie Reeves **Monterey County (1)**
Garth Parker

W. Oliver Moore **Napa County (1)**
George I. Dawson

R. A. Cushman **Orange County (2)**
Harry E. Zaiser Dexter R. Ball
J. I. Clark

H. N. Miner **Placer County (1)**
R. H. Eveleth

Thomas A. Card **Riverside County (1)**
W. B. Wells

Frank Reardon **Sacramento County (2)**
Charles E. Jones J. Roy Jones
George Foster

R. W. O'Bannon **San Benito County (1)**
J. M. O'Donnell

Gayle G. Moseley **San Bernardino County (2)**
A. N. Donaldson R. S. Gibbs
F. H. Folkins

John C. Yates **San Diego County (4)**
George B. Worthington T. O. Burger
Mott H. Arnold E. F. Chamberlain
Martha Welpton D. R. Higbee
Lillian B. Mahan

DELEGATES	ALTERNATES
San Francisco County (16)	
Edmund Butler	Thomas E. Bailly
William E. Chamberlain	Gilbert M. Barrett
William R. P. Clark	LeRoy Brooks
Walter E. Coffey	John F. Cowan
Walter Scott Franklin	Randolph G. Flood
John H. Graves	Henry Harris
T. Henshaw Kelly	Samuel H. Hurwitz
Eugene S. Kilgore	Irving S. Ingber
William Palmer Lucas	Alexander S. Keenan
Alfred C. Reed	A. S. Musante
Fred. H. Rodenbaugh	Hans Lissner
H. A. L. Ryfkogel	Harvard McNaught
Karl L. Schaupp	Musante
I. W. Thorne	Robert R. Newell
Victor G. Veckl	Otto Westerfeld
John Homer Woolsey	Lloyd Bryan
San Joaquin County (2)	
Barton J. Powell	B. F. Walker
R. T. McGurk	Margaret H. Smyth
San Luis Obispo (1)	
Gifford L. Sobey	C. J. Teass
San Mateo County (1)	
W. O. Calloway	
Santa Barbara County (1)	
Henry Ullmann	F. R. Nuzum

DELEGATES	ALTERNATES
Santa Clara County (2)	
George L. Barry	Edwin M. Miller
Peter A. Jordan	Alson A. Shufelt
Santa Cruz County (1)	
Ambrose F. Cowden	Jessie C. Farmer
Shasta County (1)	
Ferdinand Stabel	Clarence E. Reed
Siskiyou County (1)	
S. S. Kalman	
Solano County (1)	
John W. Green	F. B. Fry
Sonoma County (1)	
J. W. Seawell	R. M. Bonar
Stanislaus County (1)	
C. E. Pearson	E. F. Reamer
Tehama County (1)	
F. J. Bailey	J. A. Owen
Tulare County (1)	
I. H. Betts	Elmo R. Zumwalt
Tuolumne County (1)	
George C. Wrigley	William L. Hood
Ventura County (1)	
J. Bianchi	B. E. Merrill
Yolo-Colusa County (1)	
Fred R. Fairchild	W. E. Bates
Yuba-Sutter County (1)	

General Information

Registration and Information—The registration and information desk is located in the Galleria, Los Angeles Biltmore. All persons attending the convention, whether members or not, are requested to register immediately on arrival. Beginning Sunday, April 24, registration secretaries will be on duty daily from 9 a. m. until 5 p. m.

Guests and Visitors—All guests and visitors are requested to register. All General Sessions and scientific meetings are open to visitors and guests.

Badges—Four kinds of badges will be issued by the registration bureau.

Members—Only active, associate, affiliate or honorary members of the California Medical Association will be issued the usual membership badge.

Guest—A special badge will be issued to all fraternal delegates, visiting physicians, physiotherapists, medical social workers, nurses, and other technical specialists who are attending the meetings upon official invitation of the Association.

Delegates and Alternates—The usual official badge is provided for this purpose, and will be issued only to persons authorized to wear it.

Councillors—An official badge is provided for all officers and members of the Council.

Membership Cards—Every member in good standing in the California Medical Association has been issued an official membership card for 1927.

Suggestions and Constructive Criticism—The officers and committees have tried to do everything possible to make the meeting a success. Suggestions and constructive criticism calculated to make future meetings more useful will be welcomed by any of the officers. Complaints of whatever character should be made to the registration desk, where they will receive attention.

Social Program—The social program is in the hands of the Entertainment Committee, and is published on the back of this program.

Press Representatives—Accredited press representatives are welcome, and they will be accorded every possible courtesy.

Publicity—All publicity is in the hands of the Publicity Committee. It is requested that all persons having matter of "news" value report it to this committee. It is particularly requested that all "news" about any phase of the convention be given out through the official committee, and in no other way.

Exhibits—Only advertisers in "California and Western Medicine" are permitted to exhibit at the annual meeting.

Rules Regarding Papers and Discussions at the State Meeting—Upon recommendation of the Executive Committee, the following rules regarding papers have been adopted by the Council:

1. The maximum time that may be consumed by any paper is fifteen minutes, provided that not to exceed ten minutes' latitude may be allowed invited guests at the discretion of the presiding chairman.

2. Motions from the floor to extend the time of an author may not be entertained by the presiding officer.

3. The maximum time permitted any individual discussant on any paper is four minutes. This also applies to the author in closing his discussion. No discussant may speak more than once upon the same subject.

4. No paper will be accepted by the General Program Committee nor by section program committees unless accompanied by a synopsis of not to exceed fifty words.

5. Papers shall not be "read by title."

6. A copy of each and every paper presented at the state meeting must be in the hands of the chairman or secretary of the section or in the hands of the general secretary before the paper is presented.

7. No paper shall be read by any member of the Association at any annual meeting until the same has been submitted and approved by the Program Committee, and the Program Committee is authorized, if it so desires, in

determining whether any paper shall be worthy of presentation, to secure the opinion of any member or members of the Association.

8. All papers read at the annual meeting shall be published in full in "California and Western Medicine" as soon after the meeting as space will permit, or at the option of the author, an abstract of the paper of about one column in length shall be published as soon as possible after the meeting with reprints in full of the entire paper (the cost of setting up type for the reprint to be borne by the Association, and all other costs to be borne by the author).

9. No member may present more than one paper at any one state meeting. A member may, however, be a collaborator on more than one paper if these papers are presented by different authors.

10. Failure on the part of an author to present a paper precludes acceptance of future papers from such author for a period of two years, unless the author explains, to the satisfaction of the Executive Committee, his inability to fulfill his obligation.

HOUSE OF DELEGATES CHAPTER III

Section 1. The House of Delegates shall be the legislative body of the Association, and shall consist of the officers of the Association, and the regularly elected and properly certified delegates or alternates representing their several county societies.

(A delegate or alternate whose name has not been certificated in writing as such by his county unit through the president and secretary, and filed in the office of the state secretary at least fifteen days subsequent to the first of March, shall be entitled to a seat in the House of Delegates. The state secretary shall notify each delegate of his election and forward certificate credentials with notice of councillor's rulings governing election and penalty for nonattendance; and no delegate absent without prior notification to his county secretary or secretary of this Association shall be eligible to a seat in the House of Delegates the following year; and it shall be the duty of the secretary to mail a list of all absent delegates to the proper county units. Proposed amendment to be acted upon H. D. 1927.)

Sec. 2. Each county society shall be entitled to send to the House of Delegates each year one delegate and one corresponding alternate for every fifty members as of the first day of October of the preceding year, and one for each major fraction thereof, provided that each county society which has made its annual report and paid its assessment, as provided in this Constitution and By-Laws, shall be entitled to at least one delegate and one alternate.

Sec. 3. Twenty-five delegates shall constitute a quorum.

Sec. 4. Delegates and alternates shall be elected for a term of two years, and those societies entitled to more than one representative shall arrange such election so that one-half of their delegates and alternates, as near as may be, shall be elected each year.

Sec. 5. The House of Delegates shall approve all memorials and resolutions of whatever character issued in the name of the Association before the same shall become effective.

Sec. 6. The sessions of the House of Delegates shall be open to all members of the Association.

Sec. 7. The House of Delegates shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may present and participate in the discussion of their reports.

Sec. 8. The House of Delegates shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

General Meetings

FIRST GENERAL SESSION

Ballroom, Biltmore Hotel, Los Angeles
Monday, April 25, 10 a. m.

WILLIAM T. McARTHUR, M. D., President
Pacific Mutual Building, Los Angeles

- 1. *Invocation*—Rev. Hugh K. Walker, Pastor First Presbyterian Church, Los Angeles.
- 2. *Address of Welcome*—Hon. George E. Cryer, Mayor of Los Angeles.
- 3. *President's Annual Address*—William T. McArthur, M. D., Pacific Mutual Building, Los Angeles.
- 4. *Address of President-Elect*—Percy T. Phillips, M. D., Santa Cruz.
- 5. *Announcement Regarding Permanent Quarters*—President William T. McArthur, M. D.
- 6. *Report of Arrangements Committee*—William Duffield, M. D., Auditorium Building, Los Angeles.

SECOND GENERAL SESSION

Ballroom, Biltmore Hotel, Los Angeles
Tuesday, April 26, 10 a. m.

Pacific Mutual Building, Los Angeles

- 1. *The General Practitioner*—James B. Herrick, M. D., Chicago, Illinois.

- 2. *The Profit and Loss Account of Modern Medicine*—Stuart McGuire, M. D., Richmond, Virginia.
- 3. *Annual Report of the Council*—O. D. Hamlin, M. D., Federal Realty Building, Oakland.

THIRD GENERAL SESSION

Auditorium, Pacific Mutual Building, Los Angeles
Tuesday Evening, April 26, 8 p. m.

- 1. *Public Health Address*—William A. Evans, M. D., Chicago, Illinois.

FOURTH GENERAL SESSION

Ballroom, Biltmore Hotel, Los Angeles
Wednesday, April 27, 10 a. m.

Pacific Mutual Building, Los Angeles

- 1. *Retrospect of Gynecology*—Howard A. Kelly, M. D., Baltimore, Maryland.
- 2. *Address*—W. W. Campbell, President University of California, Berkeley.

FIFTH GENERAL SESSION

Ballroom, Biltmore Hotel, Los Angeles
Thursday, April 28, 2 p. m.

- 1. *Medicine in the Department of the Interior*—Hon. Hubert Work, Secretary of the Interior.
- 2. *Address*—Surgeon-General Hugh Cumming.

Diagram of Meetings

		Ball Room	Music Room	Pacific Mutual	Room 3	Room 7	Audi-torium	Audi-torium
Monday April 25	10-12:30	First General Session—Presidential Addresses and Committee Reports—Ballroom						
	2:30	Obstetrics	General Medicine	General Surgery	Derma-tology	Eye, Ear, Nose, and Throat	Urology	Radiology
	8-10	First House of Delegates. Music Room. All C. M. A. members invited						
Tuesday April 26	10-12:30	Second General Session—Invited Guests—Ballroom						
	2:30-5	Gynecology	General Medicine	General Surgery	Anesthe-siology	Eye, Ear, Nose, and Throat	Urology	Radiology
	8-10	Thrd Public Meeting—Philharmonic Auditorium. William A. Evans, M. D., Speaker						
Wednes-day April 27	10-12:30	Fourth General Session—Invited Guests—Ballroom						
	2:30-5	Anesthe-siology	Pediatrics	Industrial Medicine and Surgery	Derma-tology	Eye, Ear, Nose, and Throat	Neuropsy-chiatry	Radiology
	8-10	Second House of Delegates—Music Room. All C. M. A. members invited						
Thursday April 28	10-12:30		General Medicine	General Surgery				
	2:00	Fifth General Session—Invited Guests—Ballroom						
	2:30-5				Neuropsy-chiatry	Pathology	Urology	
		President's Dinner and Dance—Thursday Evening—Ballroom						

Outline of Meetings, Dinners and Luncheons

Meetings of the House of Delegates—Monday and Wednesday evenings, April 25 and 27, at 8 p. m. in the Music Room.

Council Meetings—

First Meeting—Sunday, April 25, at 8 p. m.
Second Meeting—Monday, April 26, at 2:30 p. m.
Third Meeting—Tuesday, April 27, at 2:30 p. m.
Fourth Meeting—Wednesday, April 28, at 2:30 p. m.
Fifth Meeting—Thursday, April 29, at 2:30 p. m.
General Sessions—The public is invited to attend the following General Sessions:
Monday, 10 a. m. to 12:30 p. m.—Presidential Addresses, ballroom.
Tuesday, 10 a. m. to 12:30 p. m.—Addresses. Invited guests. Ballroom.
Tuesday, 8 p. m. to 10 p. m.—Open meeting, Philharmonic Auditorium.

Wednesday, 10 a. m. to 12:30 p. m.—Addresses. Invited guests. Ballroom.
Thursday, 2 p. m.—Addresses. Invited guests. Ballroom.
President's Dinner and Dance—Thursday evening, ballroom.

Councilors and County Officers' Luncheon—Thursday, 12:30 to 2 p. m., Room 4.
All members of the Council and all presidents and secretaries of constituent societies are requested to be present at a luncheon to be held in Room 4, on Thursday, at 12:30. Please make your reservations for this luncheon at the registration desk as early as possible.
Program Committee and Section Officers' Luncheon—Wednesday, 12:30 to 2:30 p. m., Room 4.
The Program Committee and all incoming and outgoing Section secretaries and chairmen are invited to attend this luncheon. Please make reservations at the registration desk.

Section Meetings

ANESTHESIOLOGY SECTION

DOROTHY A. WOOD, M. D., Chairman
1390 Seventh Avenue, San Francisco
MARY F. KAVANAGH, M. D., Secretary
1020 Union Street, San Francisco

FIRST MEETING

Room 3, Hotel Biltmore
Tuesday, April 26, 2:30 p. m.

1. *Report of Two Hundred Anesthetizations of Children Under Ten Years of Age, with Nitrous-Oxide-Oxygen (Only) Used as an Anesthetic Agent*—Dorothy A. Wood, M. D., 1390 Seventh Avenue, San Francisco.
Two objections to the use of nitrous-oxide-oxygen in children formerly held. Gradual lowering of age limit in recent years until now it is felt that age has no influence in the selection of an anesthetic. Advantages of nitrous-oxide-oxygen in certain pathological conditions. Classification of cases as to age and the types of operations performed. Repeated anesthetization of same subjects. Technique of administration. Conclusions.

2. *Postoperative Pulmonary Complications*—L. R. Chandler, M. D., 490 Post Street, San Francisco.

A study is made of some of the common postoperative pulmonary complications. They are divided into three fairly definite groups: 1. The early pulmonary complications. 2. The late pulmonary complications. 3. Postoperative massive collapse of the lung. The clinical features of each group are presented. The histories of five cases, representing these three clinical types are given. The possible causes of postoperative lung complications are reviewed, and a plan is suggested which might reduce their frequency.

3. *Motion Pictures of Congress of Anesthetists with British Medical Society*—Shown by Mary E. Botsford, M. D., 807 Francisco Street, San Francisco.

4. *The Patient from the Standpoint of the Anesthetist*—Niel C. Trew, M. D., 2919 Waverly Avenue, Los Angeles.

General classification of patients according to sex, age, race, and personal peculiarities. The influence of pathological conditions; status lymphaticus; thyroid cases; heart lesions; tuberculosis; high blood pressure; acidosis; diabetic patients and general toxic conditions—septic cases.

5. *Removal of Teratoma of Mediastinum Under Gas and Oxygen Anesthesia (Report of a Case)*—Mary F. Kavanagh, M. D., 1020 Union Street, San Francisco.
Notes taken from History Record No. 56,737, University of California Hospital. History of the case. Operation under gas and oxygen anesthesia. Anesthetic record.

SECOND MEETING

Ballroom, Hotel Biltmore
Wednesday, April 27, 2:30 p. m.

1. *Advantages of Ethylene Oxygen as a General Anesthesia*—George A. Johnstone, M. D., Glendale Sanitarium and Hospital, Glendale.

Ease of induction and rapidity of anesthetic recovery. Less nausea and vomiting. Relaxation without cyanosis. Freedom from postoperative sweating. Narrow anesthetic margin. Absence of respiratory irritation. Increase in blood pressure during anesthesia. Ideal anesthetic for age extremes. Disadvantages, odor; danger of explosion.

2. *Tonsillectomy Under Nitrous Oxide, Oxygen Anesthesia*—Merton J. Price, M. D., 490 Post Street, San Francisco.

Contraindications to ether in presence of pulmonary and kidney pathology. Necessity for special technique. Advantages and disadvantages. Preoperative medication. Report of cases.

3. *Anesthesia in Urologic Surgery*—Mary E. Botsford, M. D., 807 Francisco Street, San Francisco; Ethel Righetti, M. D., 305 Walnut Street, San Francisco; and Clark M. Johnson, M. D., Fitzhugh Building, San Francisco.

Increasing use of local anesthesia in urologic surgery because of inhibition of kidney function by ether. Influence of morphin. Report on experiments with N₂O and O₂ to ascertain effects on kidney function, with and without morphin.

4. *The Use of Carbon Dioxide in Anesthesia for Intrathoracic Surgery*—Edgar L. Leavitt, M. D., St. Luke's Hospital, San Francisco.

Carbon dioxide as a respiratory stimulant in chest surgery. Action in abolishing cough reflex. Report of cases.

DERMATOLOGY AND SYPHILOLOGY SECTION

HARRY E. ALDERSON, M. D., Chairman
320 Medico-Dental Building, 490 Post Street
San Francisco

CHARLES E. SCHOFF, M. D., Secretary
203 Farmers and Mechanics Bank Building
104 Eighth Street, Sacramento

FIRST MEETING

Room 3, Hotel Biltmore
Monday, April 25, 2:30 p. m.

1. *Anaphylactic Dermatoses as Clinical Problems*—Moses Scholtz, M. D., Los Angeles.

Clinical experience versus laboratory in anaphylactic cutaneous tests. Allergy versus anaphylaxis. Overemphasis of allergy in occupational dermatoses and drug eruptions. Clinical characteristics of anaphylactic eczemas—their differentiation from systemic toxic, seborrheic, strepto and staphylococcic, mycotic, etc. Diagnostic limitations of cutaneous tests. Specificity of cutaneous tests. Technical limitations of cutaneous tests. Therapeutic efficiency of cutaneous tests.

2. *Papular Urticaria*—Irving Bancroft, M. D., 419 Chapman Building, 756 South Broadway, Los Angeles.

Foreign authors say that papular urticaria and prurigos are from the same basic cause. Urticaria and allergic dermatitis also are often from the same basic cause. Children in Los Angeles often have chronic papular eruption which is due to external irritants and which is often mistaken for scabies.

3. *Nonspecific Protein Therapy in Dermatology*—From the Department of Dermatology, University of California Medical School. Hiram E. Miller, M. D., and Norman Epstein, M. D., 803 Fitzhugh Building, 384 Post Street, San Francisco.

Nonspecific protein therapy has assumed an important rôle in the treatment of some dermatoses. Various proteins have been used to produce local or systemic reactions which exert a beneficial action on certain pathological processes. This type of treatment has been found of value in kerion ringworm of the scalp, ringworm of the beard, sycosis vulgaris, chronic pyogenic infections of the skin, and in syphilitic lesions which resist other therapy. The method of employment of these proteins is discussed and its effect upon certain dermatological conditions reviewed.

4. *Treatment of Acne*—Ernest D. Chipman, M. D., 501 Union Square Building, 350 Post Street, San Francisco.

The rational treatment of acne is directed against an obvious pathology. This consists of an increase both in the size and the functional activity of the sebaceous glands, a plugging of their follicles and the formation of comedones. The comedone is the primitive element of acne. Some comedones become

infected to form papules and pustules. If there is no comedone there is no acne. The x-ray reduces the size and functional activity of the sebaceous glands. Certain keratolytics help to keep open the sebaceous ducts. The combination of these two agents gives the best result in practice. The treatment by diet, internal medication, vaccines, etc., will also be discussed.

5. *Multiple Hemorrhagic Sarcoma of Kaposi* (Case Report)—From the Department of Dermatology, Stanford University School of Medicine. Ernest K. Stratton, M.D., 414 Medico-Dental Building, 490 Post Street, San Francisco.

History of primary tumor in skin ten years before multiple lesions appeared; photographs, microscopical sections, etc., showing pathology of tumors and character of gland involvement.

SECOND MEETING

Tuesday, April 26, 9 a. m.

Clinical Program

(To be held in the morning at one of the hospitals in Los Angeles, beginning at 9 a. m. This has not been definitely arranged as to place and time. No session in the afternoon.)

THIRD MEETING

Room 3, Hotel Biltmore

Wednesday, April 27, 2:30 p. m.

1. *Coccidioides Granuloma*—Harry P. Jacobson, M.D., 313 North Soto Street, Los Angeles.

The disease is most likely more prevalent than would appear from the reports in the literature. Its similarity to tuberculosis is frequently confusing to the clinician. Copper seems to offer promise of success in the treatment of this disease.

2. *Progressive Pigmentary Dermatitis (Schamberg's Disease)*—H. J. Templeton, M.D., Oakland.

Progressive pigmentary dermatitis (Schamberg) is a definite clinical entity. A new case is herein reported with a summary of the findings in previously recorded cases. A histopathologic study is included. Both the clinical and the laboratory findings are contrasted with those found in Majocchi's disease and angioma serpiginosum.

3. *Treatment of Malignant Growth of the Mouth*—Irwin Sutton, M.D., 916 Taft Building, 1680 North Vine Street, and Rea Proctor McGee, M.D., Hollywood Security Building, 6381 Hollywood Boulevard, Hollywood, California.

Malignant neoplasms of the mouth fall into three general groups: first, those that destroy tissue; second, those that destroy function and appearance by pressure; third, those that are limited to the surface.

In the first group we find all forms of carcinoma, in the second group are sarcomas and malignant cysts, in the third group are epitheliomas and leukoplakias.

General operative and nonoperative treatment and reparative measures particularly with a view toward restoration of function and appearance will be discussed.

4. *Nonspecific Treatment of Syphilis*—Merlin T. R. Maynard, M.D., 511 Twohy Building, San Jose.

1. The factors of resistance and immunology are often forgotten in the treatment of the luetic patient. 2. By the nonspecific handling of the case I mean the use of therapeutic measures that tend not toward the poisoning of the spirochaete in the organism, but toward the increasing of the bodily defenses to the infecting agent. 3. These measures attempt the production of heat, phagocytosis, the formation of antibodies, and the raising of the individual to the best possible state of health. 4. These methods are described, and are suggested as adjuncts to efficient specific therapy.

5. *Early Syphilitic Manifestations Appearing During the Course of Antisyphilitic Treatment*—Kendal P. Frost, M.D., 831 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

A report of two instructive cases. Case 1—Syphilitic alopecia developing one month after treatment, having received five injections of neoarsphenamine and one of mercury salicylate. Case 2—Characteristic syphilitic papules appearing during the terminal stage of postarsphenamine dermatitis following six injections of neoarsphenamine in primary Wassermann positive syphilis. The Wassermann reaction during the papular eruption was negative and the eruption faded spontaneously in a few days. These cases are instructive because they seem to indicate that a clinical manifestation of early syphilis can make its appearance without spirochaetosis. It is probably explainable on an assumption of a toxin so affecting the vasomotor system that that treatment did not influence the development of lesions, the evanescence of the manifestations and absence of other signs of activity of the disease being evidence of its being under control.

EYE, EAR, NOSE, AND THROAT SECTION

PERCIVAL DOLMAN, M.D., Chairman

1035 Medico-Dental Building, 490 Post Street

San Francisco

SIMON JESBERG, M.D., Secretary

1151 West Sixth Street, Los Angeles

FIRST MEETING

Room 7, Biltmore Hotel

Monday, April 25, 2:30 p. m.

1. Chairman's Address: *The Essentials of a Training in Refraction*—Percival Dolman, M.D., 1035 Medico-Dental Building, 490 Post Street, San Francisco.

2. *Molluscum Contagiosum of Eyelids*—Hugo A. Kiefer, M.D., 406 Brockman Building, 526 West Seventh Street, Los Angeles.

Discussion opened by Frank E. Detling, M.D.

Discusses etiology, incidence, pathology, and treatment. Report of a case.

3. *The Surgical and Radium Aspects of Extensive Ocular Melanosis*—P. Obarrio, M.D., 204 Union Square Building, 350 Post Street, San Francisco.

Discussion opened by Walter Scott Franklin, M.D.

Melanosis of conjunctiva. Report of case. Describes pathology and symptoms. Treatment by radium.

4. *Experiences with Thermophore Therapy*—M. F. Weymann, M.D., 418 Westlake Professional Building, 2007 Wilshire Boulevard, Los Angeles.

Discussion opened by Joseph L. McCool, M.D., Portland, Oregon.

Treatment of pneumococcus ulcer, dendritic ulcer and indolent ulcer of the cornea, and neoplasms of the globe and lids with the thermophore of Shahan is described. For successful results one must use the proper temperature, complete anesthesia, firm pressure and applicators larger than the lesion treated.

5. *Pyocenic Stomatitis—With a Report of Some Animal Experimental Work*—Fred H. Linthicum, M.D., 914 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

Discussion opened by Roy W. Hammack, M.D.

Case report with fatal termination in a middle-aged woman, following pregnancy. Describes bacterial studies and animal experimentation.

SECOND MEETING

Room 7, Biltmore Hotel
Tuesday, April 26, 2:30 p. m.

1. *Trichloracetic Acid in the Treatment of Ulcerative Laryngeal Tuberculosis*—Bertram C. Davies, M. D., 924 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

Discussion opened by C. Benson Wood, M. D.

Describes method of applying the pure acid to tuberculous ulceration of the larynx. Beneficial results obtained. Reports of five cases.

2. *The Technique of Laryngectomy*—Harrington B. Graham, M. D., 619 Medico-Dental Building, 490 Post Street, San Francisco.

Discussion opened by I. W. Thorne, M. D.

The technique of Hautant and of MacKenty has been followed by the writer, that is, a skeletonization of the larynx under local anesthesia, a dissection from below upward and an extraction under ether followed by drainage of the wound. The paper is offered to call forth a discussion of various methods in technique.

3. *The Relation of Arsenicals Used in the Treatment of Syphilis to Optic Neuritis*—George N. Hosford, M. D., 437 Medico-Dental Building, 490 Post Street, San Francisco.

Discussion opened by Percival Dolman, M. D.

Reports a case that developed optic neuritis following four injections of neosalvarsan for the treatment of recently acquired syphilis. Discussion of cause of the neuritis. Review of literature.

4. *Unilateral Sighting*—Lloyd Mills, M. D., 814 Edwards-Willey Building, 609 South Grand Avenue, Los Angeles.

Discussion opened by Roderic O'Connor, M. D.

Author's work showing that sighting is done by the dominant eye only. Line of sight is lateral, with but few exceptions and is in relation to fundamental, not acquired, handedness. Theory that vision is cyclopean is discarded.

5. *Motais Operation—The Results in Eighteen Cases*—Roderic O'Connor, M. D., 910 Medical Building, 1904 Franklin Street, Oakland.

Discussion opened by Lloyd Mills, M. D.

An argument in favor of this operation for ptosis, because it takes advantage of the associated action of superior rectus and lid elevator. Cosmetic advantages of this operation.

THIRD MEETING

Room 7, Biltmore Hotel
Wednesday, April 27, 2:30 p. m.

1. *Streptococcus Mucosus Infection Causing Lateral Sinus Thrombosis*—H. J. Profant, M. D., 1421 State Street, Santa Barbara.

Discussion opened by Hill Hastings, M. D.

Bacteriology and pathology of streptococcus mucosus. Case report; a young boy with mild otitis and no mastoid symptoms. Long latent period. Sudden onset of meningeal irritation, due to subdural abscess followed by definite sinus thrombosis symptoms. Value of two-stage operation in aiding walling off of infection. Possible value of mercurochrome in systemic infection.

2. *Surgical Treatment of Frontal Sinus Suppurations*—J. Frank Friesel, M. D., 711 Merritt Building, 307 West Eighth Street, Los Angeles.

Discussion opened by Frank A. Burton, M. D.

Frontal sinus suppurations relatively rare. Pathology and complications of frontal sinusitis. Treatment by intranasal method. Surgical anatomy and operative landmarks shown with lantern slides. Type of operation determined by size, contour, etc., of sinuses. Bibliography. Report of three cases.

3. *Lipiodol in Chronic Lung Suppurations*—C. Benson Wood, M. D., 700 Merritt Building, 307 West Eighth Street, Los Angeles.

Discussion opened by E. Richmond Ware, M. D.

A short resumé of the early use of iodized oil in the bronchial tree. Methods of introduction with comments. Report of cases with slides of chest radiographs. Conclusions. Bibliography.

4. *Plastic Surgery of the Face*—J. Paul De River, M. D., 369 Flood Building, 870 Market Street, San Francisco.

Discussion opened by John Homer Woolsey, M. D.

Value of plastic surgery. Progress since World War. Solution of many problems by cooperation of general surgeon and specialist. Improvement of technique.

5. *Demonstration of the Hess Curtain for the Diagnosis of Paretic Ocular Muscles*—Dohrmann K. Pischel, M. D., 1417 Medico-Dental Building, 490 Post Street, San Francisco.

GENERAL MEDICINE SECTION

J. MARION READ, M. D., Chairman
1183 Flood Building, 870 Market Street
San Francisco

JAMES F. CHURCHILL, M. D., Secretary
700 Electric Building, 861 Sixth Street
San Diego

FIRST MEETING

Music Room, Biltmore Hotel
Monday, April 25, 2:30 p. m.

1. *The Therapeutic Use of Ephedrin*—I. C. Schumacher, M. D., and T. L. Althausen, M. D., University of California Hospital, Fourth Avenue and Parnassus Street, San Francisco.

Ephedrin was used in the following conditions: hypotension, bronchial asthma, hay fever, urticaria, and angioneurotic edema. 1. In hypotension, ephedrin consistently raised the systolic blood pressure. 2. In asthma and hay fever some relief was obtained in nearly all cases and the attacks were controlled completely in a considerable proportion of cases. 3. Urticaria and angioneurotic edema were not affected by the drug.

The most important advantages of ephedrin over adrenalin are that it is effective when given by mouth, and that its action extends over a period of many hours. The disadvantages of the new drug consist in a failure to relieve asthmatic attacks in occasional subjects, and in the occurrence of untoward gastrointestinal and nervous symptoms in rare cases.

2. *The Etiology of Cough*—William C. Voorsanger, M. D., and Fred Firestone, M. D., 1001 Medico-Dental Building, 490 Post Street, San Francisco.

Based upon an intensive study of two hundred patients with chronic cough seen at Mount Zion Chest Clinic and in private practice. All patients were submitted to a routine examination including physical, x-ray, sputum examination and sputum culture and guinea-pig inoculation. Nineteen classifications of cough are isolated. These are ostensibly nontuberculous. Emphasis is placed upon two main groups: 1. An infectious asthma and bronchitis, representing 34 per cent of the total series, which can be benefited by the use of an autogenous vaccine. 2. An undiagnosed group, representing 32 per cent of the series, in which some patients can be improved but in which most are potentially tuberculous or bronchiectatic, although not proven so.

Illustrated with charts and lantern slides.

3. *Nontuberculous Lung Suppuration*—Philip H. Pierson, M. D., 811 Medico-Dental Building, 490 Post Street, San Francisco.

Subject divided into localized abscess or abscesses, chronic pneumonia, and bronchiectasis. These are discussed from the standpoint of

- Etiology: 1. Aspiration {
2. Embolic {
3. Pneumonic {
4. Empyemic {
- | | |
|---------------|--|
| a. Infections | { pneumococcus
streptococcus
influenza |
| b. Traumatic | { whooping cough |

Pathology: Of particular importance in differentiating chronic pneumonic and bronchiectasis. This is helpful in determining prognosis. Treatment: Prophylactic. Conservative versus radical (this will allow discussion from internists and surgeons). Prognosis: Pathology helps; more promptly determined and more favorable in processes with acute onset than in those secondary to chronic processes.

4. *Lipiodol in Chronic Pulmonary Suppurations*—E. Richmond Ware, M. D., 506 Professional Building, 1052 West Sixth Street, Los Angeles.

1. Lipiodol, its physical and chemical properties. 2. Technique of injection. 3. Class of cases in which it is to be employed: (a) indications; (b) contraindications. 4. Its value as a diagnostic procedure in: (a) bronchiectasis; (b) lung abscess; (c) determining effectiveness of collapse by pneumothorax or thoracoplasty; (d) pulmonary tuberculosis. 5. Therapeutic value. 6. Toxic effects. 7. Illustrative cases, with demonstration of slides of films.

5. *Experimental Work on the Effects of Diuretics in Nephritis*—Burrell O. Raulston, M. D., 2007 Wilshire Boulevard, Los Angeles.

This paper presents the results of a study of the diuretics in normal rabbits and in rabbits with experimental nephritis. Some interesting observations on spontaneous diuresis were made in control experiments. The effects of specific diuretics in normal rabbits, in rabbits injected intramuscularly with horse serum and in rabbits during the acute reaction from intravenous injection of foreign protein, as observed in a large group of experiments are shown in charts. A lowering of the threshold for sugar excretion is indicated. A comparison of these results, with those obtained in working with animals that have nephritis produced by x-ray exposures.

SECOND MEETING

Music Room, Biltmore Hotel
Tuesday, April 26, 2:30 p. m.

1. *Treatment of the Ambulatory Patient with Peptic Ulcer*—Fletcher B. Taylor, M. D., 701 Medical Building, 1904 Franklin Street, Oakland.

The successful treatment of ulcer rests on the consideration of multiple factors in etiology. Hereditary irritability of the digestive tract may be one of the important considerations. Foci of infection and the forces which find expression as duodenal traumata should be eradicated. The "central nervous load" which the patient carries is one factor which separates the experimental ulcer in animals from the clinical ulcer in man. The patient must shape his program to the cure of his ulcer for a period of from one to two years. If successful, most of this time the patient will be symptom-free. Surgery is but one step in the cure of one group of ulcer patients. Peptic ulcer is essentially a medical disease in an ambulatory patient.

2. *New Methods of Gastric Analysis*—Arthur L. Bloomfield, M. D., Stanford Hospital, Clay and Webster streets, San Francisco.

The difficulties and disadvantages of the usual methods of gastric analysis are discussed and certain physiological considerations, especially with reference to the secretion of acid, will be taken up. The advantages of the alcohol test meal, which makes possible the estimation of volume of gastric secretion

as well as the acidity of the pure gastric juice will be discussed, with a summary of the clinical information which can be derived from methods of this sort.

3. *The Spastic Colon*—Q. O. Gilbert, M. D., 301 Medical Building, 1904 Franklin Street, Oakland.

Disordered bowel movement is most common. Interpretation of clinical findings and symptomatology on the basis of physiological complexes suggests corrective treatment. Two main types of stimulation, extrinsic and intrinsic causing segmental or zonal contraction are recognized. The rule of "proximal stasis and distal hypermotility" suggests the frequent clinical picture. Careful observation presents, in patients with abdominal symptoms, contractions more frequent than atony. This viewpoint suggests a conception of constipation contrary to that fostered largely in the past decade, and a more rational treatment on a pathological physiological basis.

4. *The Rose Bengal Liver Function Test (Studies of the Simplification of the Test)*—William J. Kerr, M. D., University of California Hospital, Fourth Avenue and Parnassus Street, San Francisco, and N. N. Epstein, M. D., and G. D. Delprat, M. D., Fitzhugh Building, 384 Post Street, San Francisco.

Rose Bengal (diiodotetrachlorofluorescence) is eliminated from the blood stream of humans solely by the liver through the bile passages. This fact has been used to develop a clinical test for liver disease. The technique is simple and can be performed by any clinician. It is merely an intravenous procedure in which the dye is injected into the blood stream and specimens of blood examined two, eight, and sixteen minutes after the injection to determine the rate of disappearance of the dye. This rate of disappearance is very definitely delayed where liver disease is present.

The clinical application of the test is of particular value in determining the presence and extent of liver disease in an individual. The test has been applied in cases of cirrhosis of the liver, metastatic malignancy of the liver, obstructive jaundice, catarrhal jaundice, arspenamine icterus, liver abscess, pyophlebitis of the liver, chronic cholecystitis, chronic passive congestion of the liver, and syphilis of the liver.

5. *Treatment of Polycythemia Vera with Phenylhydrazine*—Samuel H. Hurwitz, M. D., 1214 Medico-Dental Building, 490 Post Street, San Francisco, and Joseph Leviton, M. D., 1015 Story Building, 610 South Broadway, Los Angeles.

The clinical symptoms of polycythemia vera (Osler's disease; Vaquez's disease) are in the main due to an increased bulk of red cells resulting from excessive erythroblastic activity of the bone marrow. The treatment has, therefore, concerned itself with methods of relieving symptoms by reducing the total blood mass. Venesection, roentgen rays, radium, and benzol have all been employed for this purpose with some modicum of success.

It is the purpose of this paper to record the clinical course of a patient with polycythemia vera treated with phenylhydrazine, and to emphasize the value and dangers of this drug as well as the importance of using certain criteria for the control of its dosage.

THIRD MEETING

Music Room, Biltmore Hotel
Thursday, April 28, 10 a. m.

1. *Chairman's Address: Clinical and Physiological Significance of Blood Pressure*—J. Marion Read, M. D., 1183 Flood Building, 870 Market Street, San Francisco.

2. *Coronary Occlusion*—P. Berman, M. D., 2308 Victoria Road, Los Angeles, and V. R. Mason, M. D., 838 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

Discussion opened by James B. Herrick, M. D.

A statistical and electrocardiographic study of the coronary T wave in 1500 electrocardiographs. This study shows the importance of this wave in recent and healed myocardial infarcts; in aortic valvular disease of arteriosclerotic and especially syphilitic origin; and in certain other affections in which heart disease was not suspected. Brief abstracts of illustrated cases. (Lantern slides.)

3. *A Review of a Series of Cases of Auricular Fibrillation*—Donald J. Frick, M. D., and Robert Helm Kennicott, M. D., 804 Medical Office Building, 1136 West Sixth Street, Los Angeles.

A report of fifty-one cases, with the following points reviewed: etiology, duration of fibrillation, concomitant cardiac conditions, effects of treatment, causes of death, high percentage of emboli in brain or viscera.

4. *Experiences with Colloidal Lead in the Treatment of Advanced Cancer*—Albert Soiland, M. D.; William E. Costolow, M. D.; and Orville N. Meland, M. D., 1407 South Hope Street, Los Angeles.

Discussion opened by Franklin R. Nuzum, M. D.

Colloidal lead, as described by Bell, and a modified colloid of lead phosphate have been used in the treatment of advanced malignancy. The reactions one sees are severe and usually affect not only the malignant cell, but also such normal tissues as blood, kidney, and liver. The results are disappointing, for they do not come up to the achievements reported by Bell, but this may be due to the type of cases we treated or to our lack of experience in administration of the proper dosage. Apparently in order to achieve any result, one must have a general as well as a local reaction.

5. *Medical Management of Gangrene of the Extremities*—J. Edward Harbinson, M. D., Woodland Clinic, Woodland.

Gangrene is usually considered a surgical rather than a medical problem. Amputation may be avoided in many cases by proper medical management. This requires the expenditure of considerable time, patience and money. Sound medical judgment is paramount in selecting cases for treatment. The points to be considered are enumerated. An outline of the medical régime for each disease of which gangrene is a complication is presented, as well as a consideration of the general measures applicable to the treatment of gangrene. Case reports, with results, are presented with color drawings showing the condition before and after treatment.

GENERAL SURGERY SECTION

FRED R. FAIRCHILD, M. D., Chairman
Woodland Clinic, Woodland

JOHN H. BREYER, M. D.

Secretary Southern Section

701 Professional Building

65 North Madison Avenue, Pasadena

EDMUND BUTLER, M. D.

Secretary Northern Section

615 Medico-Dental Building, 490 Post Street,
San Francisco

FIRST MEETING

Auditorium, Pacific Mutual Building
523 West Sixth Street

Monday, April 25, 2:30 p. m.

1. *Chairman's Address*—Fred R. Fairchild, M. D., Woodland Clinic, Woodland.

2. *The Present Trend of Gastric Surgery*—J. H. Woolsey, M. D., 907 Medico-Dental Building, 490 Post Street, San Francisco.

Discussion opened by Charles E. Phillips, M. D., and John Cowan, M. D.

A resumé of opinions of the leading world authorities upon the surgical treatment and technique of the common lesions of the stomach and duodenum. The preoperative preparation, important points in technique and postoperative results will be emphasized. The author's experience will be given. (Lantern slides.)

3. *Gastrointestinal Symptoms Masking Gall Bladder Diseases*—Clarence G. Toland, M. D., 1028 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

Discussion opened by Rea Smith, M. D.

1. Gall bladder disease can be easily diagnosed when the typical symptoms are present. 2. A part of the atypical symptomatology displayed in gall-bladder disease may be due to direct adhesions of one viscus to another or from old inflammatory processes in the abdomen. 3. But the great majority of cases are of reflex origin, due to the indirect nerve connections between the gall bladder and the gastrointestinal tract.

4. *The Treatment of Gastro Ulcer and Its Complications*—Donald C. Balfour, M. D., Mayo Clinic, Rochester, Minnesota.

Discussion opened by Ezra Rich, M. D., Ogden, and Emmet Rixford, M. D.

1. The incidence of gastric ulcer. 2. The frequency of complications: hemorrhage, obstruction, perforation, malignant degeneration, and hourglass deformity. 3. Indications for operation. 4. Operative procedures.

5. *The Clinical and Surgical Aspects of Cholesterosis of the Gall Bladder*—Stanley H. Mentzer, M. D., 516 Sutter Street, San Francisco.

Discussion by Wallace I. Terry, M. D., Donald Balfour, M. D., and Stanley Stillman, M. D.

One thousand cases of cholesterosis of the gall bladder are studied, five hundred of the cases also contain gall-stones. Comparison studies are made of the normal gall bladder, the cholesterolin-laden gall bladder, and cholesterosis with stones; twelve tables illustrate the essential parallelisms and deviations. Extensive and careful clinical data are compared with x-rays (plain plate and Graham-Cole), clinical diagnoses and their errors, history, etc. Obesity and pregnancy are studied in relation to cholesterosis of the gall bladder with blood-cholesterol graphs, etc. The operative findings, procedure and errors given, and the pathological descriptions correlated with the preoperative opinions. Adjacent pathology (nephritis, pancreatitis, etc.) are studied and compared with cholecystic cases of evident inflammatory origin. Nine conclusions are drawn.

SECOND MEETING

Auditorium, Pacific Mutual Building

523 West Sixth Street

Tuesday, April 26, 2:30 p. m.

1. *Industrial Traumatic Thrombosis of the Upper Extremities*—Joseph K. Swindt, M. D., 546 Investment Building, Pomona.

Discussion opened by Roy W. Hammack, M. D.

The definition of traumatic thrombosis and a review of reported cases arising from occupational activity suggest: 1. Their relation to the Working Men's Compensation Act which depends upon recognition of chronic traumatism as a direct cause of thrombosis, without previous or latent infection. 2. The mechanical theory of thrombus formation as held by the modern (Aschoff) school is based on three factors: (1) slowing of the stream; (2) changes

in the vessel wall; (3) changes in the blood constituents. 3. The prevalence of traumatic thromboses in the upper over the lower extremities is determined by the anatomical environment of the subclavian and brachial veins, which affords exceptional opportunity for the opposing forces of intra- and extrathoracic effort to slow the stream and damage the wall of the vessels between the clavicle and the first rib. 4. The metamorphosis of a thrombus explains the prognosis and suggests the treatment of primary rest and later activity and the futility of surgical attack. 5. Report of case. 6. Bibliography.

2. *The Ascending Colon—Abnormalities and Constricting Bands*—Foster K. Collins, M. D., 914 Detwiler Building, 412 West Sixth Street, Los Angeles.

Discussion opened by Alanson Weeks, M. D.

The paper considers the embryology and normal rotation of this portion of the colon. The abnormal positions due to faulty rotation and other abnormalities, together with bands causing acute and chronic surgical conditions with their symptoms and surgical treatment are discussed.

Brief case reports are given of several patients coming to operation, with slides showing x-ray and operative findings.

3. *Extra Articular Fusion of the Hip-Joint*—John C. Wilson, M. D., 410 Medical Office Building, 1136 West Sixth Street, Los Angeles.

Discussion opened by Edward Bull, M. D.

Certain pathologic changes of the hip-joint require elimination of motion for relief of symptoms. The hip-joint has been found difficult to fuse by joint erosion. A method of ilio-femoro-plasty, simple and successful, is offered. The practical application of hip-joint fusion to juvenile tuberculosis is discussed.

4. *The Indications for Whole Blood Transfusion*—LeRoy Brooks, 731 Medico-Dental Building, 490 Post Street, San Francisco.

Discussion opened by R. S. Dinsmore, M. D., Cleveland Clinic, and Leo P. Bell, M. D.

Blood transfusions were formerly rarely done. The work on blood grouping which made the procedure practically safe did much to make it more popular. There have been many techniques of giving citrated or whole blood evolved. Whole blood transfusions are preferable. The good results which usually follow transfusion have done much to broaden the usefulness of the procedure. The aim of the paper is to encourage more frequent use of transfusions and the indications are discussed.

5. *Immediate and Remote Results of Prostatectomy*—Arthur B. Cecil, M. D., 1016 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

Discussion opened by Rea Smith, M. D.

This paper does not deal with the technique of prostatectomy. It is a critical review of the immediate and remote results of 202 consecutive prostatectomies which have been operated on by the author. It considers the condition of the patient previous to operation; functional studies and physical findings and the results of the operations which were done for the relief of prostatic obstruction. It enters into detail of the immediate results, that is, results obtained upon the patient's discharge from the hospital and further in the follow-up series of studies to do with their present physical and mental conditions, their kidney functional studies, and their sexual function.

THIRD MEETING

Auditorium, Pacific Mutual Building

523 West Sixth Street

Thursday, April 28, 10 a. m.

1. *The Goiter Problem*—George W. Middleton, M. D., Intermountain Clinic, Salt Lake City.

Discussion opened by Wallace I. Terry, M. D., and Philip K. Gilman, M. D.

2. *Preoperative and Postoperative Care of Goiter Patients*—R. S. Dinsmore, M. D., Cleveland Clinic, Cleveland, Ohio.

Discussion opened by H. H. Searls, M. D., and Alanson Weeks, M. D.

Preoperative care: Absolute rest. Lugol's solution. Protection of the myocardium—digitalis. Management of decompensation; of delirium. Criteria for operability. Graded operation in severe cases.

Postoperative care and complications: Hyperthyroidism reactions. Injury of recurrent laryngeal nerve—importance of early tracheotomy. Postoperative hemorrhage and mediastinal extravasation. Tetany. Transient myxedema. Psychoses. Postoperative collapse of the lungs. Tracheitis and pulmonary infection.

3. *Experimental Studies in Pulmonary Suppuration*—Emile Holman, M. D., Stanford University Hospital, Clay and Webster streets, San Francisco.

Discussion opened by Charles D. Lockwood, M. D., Pasadena; L. R. Chandler, M. D.

Tuberculous emboli introduced into the jugular vein were arrested in the pulmonary circulatory bed, where they initiated pathological changes in the pulmonary tissue resulting successively in anemia, infarction, caseation, central softening and abscess formation. The earliest appearance of a well-defined abscess following the introduction of the tuberculous embolus was on the twelfth day, whereas pyogenic emboli produced abscesses within four to six days.

The pathological changes initiated by pyogenic emboli took various forms: (1) limited consolidation about the embolus with early recovery; (2) hemorrhagic infarction with recovery or with central softening and abscess formation; (3) massive hemorrhagic consolidation and death.

A relative lymphocytosis accompanied the tuberculous processes in the lungs, as contrasted with a true polymorpholeucocytosis that accompanied the pyogenic processes.

The embolus as such produced only slight changes in the pulse and the respiratory rates. It was only when the effect of the accompanying infection made itself felt after the elapse of twelve or twenty-four hours that the pulse rate and respiratory rate became elevated (H 23, H 13).

Positive blood cultures were obtained in a number of instances following the introduction of pyogenic emboli. The bacteriemia was frequently only temporary, and the animals fully recovered (H 23, H 18, H 17, H 9). In three instances the animals died (H 10, 2H 21, 2H 18), and a complicating septicemia probably accounted for the death of two other animals (H 2 and H 5).

The embolus, introduced with the animal in the supine position, usually followed the main current in the pulmonary artery, lodging in the left lower lobe fourteen times, in the right lower lobe eleven times, in the left upper lobe twice, in the right upper lobe once, and in the right middle lobe once.

Good healing of the bronchial stump occurred in every instance in which lobectomy was performed, following an atraumatic inversion of the stump by sutures placed in the peribronchial tissues.

The uniform and invariable pathological changes which followed the introduction of a tuberculous embolus into the jugular vein suggest that this experimental method may lend itself to a study of certain much mooted questions, such as the effect of tuberculin in establishing immunity, the pathway of tuberculous infection, the value of therapeutic agents, surgical and medical, and other like problems in the realm of tuberculosis.

4. *Surgical Management of Phthisis* (Preoperative Considerations—Doctor Hoyt; Operative Considerations—Doctor Mattison)—S. J. Mattison, M. D., Professional Building, 65 North Madison Avenue, Pasadena, and Henry A. Hoyt, M. D., La Vina, California.

Discussion opened by Leo Eloesser, M. D.

Preoperative considerations: In the management of phthisis, surgery may produce in suitable cases,

irrespective of the cooperation of the patient, what prolonged bed rest might not accomplish, namely, conditions favorable for localization and healing—relaxation of pulmonary tissue, collapse of cavities, surgical cleanliness, local functional lung rest, economic recovery, and comparative efficiency.

Operative considerations: In surgical management of phthisis vital operative considerations are: individuality and physical state. Advisable considerations are age, nutrition, social position, location and character of lesion, condition of blood, temperature, pulse, blood pressure, digestive and genitourinary tract. Technical considerations are preparation, instruments, position, anesthesia, manner of procedure, wound-treatment, no manual compression.

5. *Medical Aspects of Thoracoplasty—Selection of Cases—Some Experiences of a General Surgeon in Surgery of Pulmonary Tuberculosis*—Amos D. Ellsworth, M.D., 502 Rowell Building, Fresno, and John H. Pettis, M.D., 902 Mattei Building, Fresno.

Discussion opened by Louis D. Remington, M.D., Monrovia, California.

In unilateral tuberculosis where pneumothorax is impossible, thoracoplasty offers much to otherwise hopeless cases. Danger of operation and pain being insignificant compared with the disease, it deserves to be considered better than a last resort.—A. D. Ellsworth.

Thirty thousand cases in the United States in which surgical treatment is indicated. If these cases are to receive proper treatment general surgeon must concern himself with problem. Cases chosen by tuberculosis specialist in consultation with roentgenologist and surgeon. Local anesthesia found satisfactory. Technique of operation not too difficult to be mastered by general surgeon.—J. H. Pettis.

INDUSTRIAL MEDICINE AND SURGERY SECTION

CLARENCE E. REES, M.D., Chairman
415 Elm Street, San Diego

JOHN D. GILLIS, M.D., Secretary
Detwiler Building, 412 West Sixth Street, Los Angeles
Auditorium Pacific Mutual Building
523 West Sixth Street

Wednesday, April 27, 2:30 p. m.

1. *Head Injuries Industrially Considered*—Carl Rand, M.D., 1034 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

Impressions gained from neurological examination of industrial cases that have sustained head injuries. Differences in reactions of industrial cases from those which have no insurance angle. Difficulty in evaluating dizziness as a disabling symptom. Remarks regarding general management of cases.

2. *Sickness Versus Accidents: A Medical Problem in Industrial Economics*—C. O. Sappington, M.D., 602 Hutchinson Building, 1706 Broadway, Oakland.

The present status in industrial medicine. The influence of compensation laws and insurance companies. Emphasis placed on the care of injuries. The experience of various large groups. Sickness the chief cause of absenteeism. Sickness more costly than accidents. Sickness versus accidents in insurance companies. Statement of the problem. Future possibilities. Summary. (Lantern slides.)

3. *Surgical Aspects of Chest Injuries*—Charles D. Lockwood, M.D., 605 Professional Building, 65 North Madison Avenue, Pasadena.

Experience gained regarding chest injuries during the World War not applied with sufficient courage and understanding to same in civil life.

In serious chest injuries with hemorrhage, dyspnea

and lung collapse, of greatest importance to thoroughly expose traumatized organs and treat them under direct inspection.

Most serious complication of chest injuries is opened pneumothorax or sucking wound. Such wounds should be immediately closed, if necessary, with plugging with moist gauze or other protective material until operative measures can be employed.

Methods of exposure and operative procedures in chest injuries.

4. *Industrial Medicine*—L. P. Howe, M.D., Standard Oil Building, 225 Bush Street, San Francisco.

Value of physical examinations and annual examinations of employees. Relation between personnel and medical departments. Tuberculosis in industry. A few general observations in relation to medical work in industry.

NEUROPSYCHIATRY SECTION

NATHANIEL H. BRUSH, M.D., Chairman
193 Micheltorena Street, Santa Barbara

EDWARD W. TWITCHELL, M.D., Secretary
412 Medical Building, 909 Hyde Street,
San Francisco

FIRST MEETING

Auditorium Building

Wednesday, April 27, 2:30 p. m.

1. *Chairman's Address*—Nathaniel H. Brush, M.D., Santa Barbara.

2. *Pathology in Huntington's Chorea*—W. F. Schaller, M.D., 608 Medical Building, 909 Hyde Street, San Francisco.

Modern conceptions of pathology and mechanism. Report of three personal cases. Analysis by motion pictures. Necropsy findings and serial brain sections.

3. *Psychiatry and University Men*—S. K. Smith, M.D., Strad Building, 230 Grand Avenue, Oakland.

This survey of psychiatric material seen at the University of California Infirmary over a period of three years, includes three hundred men students. An attempt is made to cover the following points: (a) An introductory idea of the development of mental hygiene services in various colleges and universities. (b) Arguments for and against the association of a psychiatric service with the student health service. (c) A consideration of types of cases encountered together with modes of handling cases. (d) A correlation of various findings such as physical, participation in university activities, etc., with psychiatric findings. (e) Recommendations for the carrying out of an adequate mental hygiene program in universities.

4. *Certain Biological Phases of Chronic Infections of the Nervous System*—J. Ross Moore, M.D., Brockman Building, 520 West Seventh Street, Los Angeles.

A philosophizing fragment in which certain known biological and psychological facts are rearranged and correlated, the idea being to develop a sequence of physiological events which may provide a proper organic basis for impressions, ideas, thoughts, conclusions and all human functional activities.

5. *Unusual (Problem) Children Analyzed*—V. H. Podstata, M.D., Livermore, California.

Analysis of physical and mental etiologic factors in three problem cases. The physical make-ups and the reaction types. The influence, direct and indirect, of acquired physical inferiorities upon development of personality. The influence of early environment. The prognosis. The preventive and curative measures.

6. *A Mental Hygiene Program for the State of California*—Aaron J. Rosanoff, M.D., 716 Westlake Professional Building, 2007 Wilshire Boulevard, Los Angeles.

A complete mental hygiene program can be organized and carried out only by a state government. California holds a comparatively high rank in the field of mental hygiene, but neither this state nor any other state has as yet attained a complete mental hygiene program.

Past experience has shown that the initiative in this matter must apparently originate from private sources. This consideration has led to the establishment of the Southern California Society for Mental Hygiene. The object of this contribution is not only to outline a mental hygiene program for this state, but also to enlist the interest and cooperation of physicians in the northern part of the state in the activities of the mental hygiene society.

OBSTETRICS AND GYNECOLOGY SECTION

LYLE G. MCNEILE, M.D., Chairman

1021 Pacific Mutual Building, 523 West Sixth Street
Los Angeles

HENRY N. SHAW, M.D., Secretary

901 Pacific Mutual Building, 523 West Sixth Street
Los Angeles

FIRST MEETING

Ballroom, Biltmore Hotel

Monday, April 25, 2:30 p. m.

1. *Chairman's Address: Contraception*—Lyle G. McNeile, M.D., 1021 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

This is essentially an obstetrical problem, but the principal discussion of it has been conducted by laymen along theological, ethical, economic, and social lines. From the physician's standpoint many physical conditions may form definite indications for the prevention of conception, but the problem is very broad, and often economic and social questions must be considered in their bearing upon the medical problem. There are certain legal restrictions placed upon the furnishing of such information by state and federal governments which should be understood. The medical profession is not yet cognizant of any guaranteed contraceptive. Relative values of various methods of contraception, based upon the medical literature, and upon reports of various "birth control" clinics in the United States and abroad, are considered.

2. *The Use of Radium in Gynecology and the Cooperation of Endotherapy in Treating Malignancy*—Howard A. Kelly, M.D., Baltimore, Maryland. (By invitation.)

Discussion opened by Albert Soiland, M.D., and Frank Lynch, M.D.

3. *Role of Fruits, Vegetables, and Milk in the Prevention of Disease*—W. D. Sansum, M.D., Cottage Hospital, Santa Barbara.

Discussion opened by Titian Coffey, M.D.

There are certain fundamental principles which apply to all diets. These will be briefly outlined, giving particular stress to those commonly violated, such as the need for amply carbohydrate; the limitation of fat; and the need for adequate amounts of protein and calcium compounds in the diet of the lactating mother.

4. *Gynecological Fallacies*—John A. Sperry, M.D., 903 Medico-Dental Building, 490 Post Street, San Francisco.

Discussion opened by W. J. Woolston, M.D.

Physician's duty: To save life. To relieve suffering and add to the sum of human happiness. Many gynecological procedures fail to attain these ends. Many of them have obverse effects. Abuse of curettage. Uterine malpositions. Tampons. Chronic urethritis. Resection of cystic ovaries. Ulcer of the cervix. Harmless birth injuries. Harmless myomata. One slide diagnosis of chronic gonorrhea. Abuse of radium and x-ray. Mishandled dyspareunia.

SECOND MEETING

Ballroom, Biltmore Hotel

Tuesday, April 26, 2:30 p. m.

1. *Fibromyomata of the Uterus*—Frank W. Lynch, M.D., University of California Hospital, Fourth Avenue and Parnassus Street, San Francisco.

Discussion opened by P. S. Doane, M.D.

A study of 550 uterine fibroids. The cases are classified according to age, location, and growth. Degeneration and complications are classified as whether they are pelvic or general. Treatment and results.

2. *The Environment During Pregnancy*—J. Morris Slemons, M.D., 819 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

Discussion opened by Henry A. Stephenson, M.D.

When life was simpler, perhaps, pregnancy required fewer changes in the routine life of the prospective mother. Many of the factors in modern life, like the automobile, call for specific advice. The high tension under which many of us live may react upon women in a way that demands a long period of enforced rest for the protection of pregnancy. The doctrine of maternal impressions, of course, has no foundation.

3. *Comparative Incidence of Pelvic Pathology*—Homer C. Seaver, M.D., 604 Medical Office Building, 1134 West Sixth Street, Los Angeles.

Discussion opened by L. A. Emge, M.D., and Phil Boller, M.D.

An attempt will be made to present the relative incidence of pelvic pathology, the frequency of what may be termed associated pathology, and various practical points of interest derived from a study of this subject from an analysis of one thousand abdominal, gynecological operations done at the Los Angeles General Hospital.

4. *Urological Complications in Pregnancy*—John K. Ormond, M.D., Ford Hospital, Detroit, Michigan. (By invitation.)

Discussion opened by Leon Watkins, M.D.

PATHOLOGY AND BACTERIOLOGY SECTION

A. M. MOODY, M.D., Chairman

St. Francis Hospital, Bush and Hyde Streets
San Francisco

ROY W. HAMMACK, M.D., Secretary

1003 Pacific Mutual Building, 523 West Sixth Street
Los Angeles

Room 7, Hotel Biltmore

Thursday, April 28, 2:30 p. m.

1. *The Icterus Index and the Van Den Bergh Test*—Gabriel Segall, M.D., 609 Brockman Building, 520 West Seventh Street, Los Angeles, and M. C. Terry, M.D., Consolidated Realty Building, 607 South Hill Street, Los Angeles.

The authors discuss recently devised tests for the recognition and quantitative estimation of bilirubin in blood serum and report thirty-five clinical cases in which they made use of the tests mentioned in the title. While both are found useful, the Van Den Bergh is shown to be the more reliable and informative.

2. *Some Considerations of Physical States in Diabetes*—Dwight M. Ervin, M. D., 201 Medical Building, 909 Hyde Street, San Francisco.

The cell is here considered as a system in which there are two fundamental ideas. First, energy is stored in the form of structure, and, second, it is the state of that structure which permits the transformation of the stored energy into work.

The condition or state of the cell structure as an emulsion is the fundamental idea of this system to do work, and in the absence of glycogen this state is missing.

Experimental data in proof of the above deductions when applied to diabetes will be presented.

3. *The Effects of Lead Upon Normal and Malignant Tissues*—F. R. Nuzum, M. D., Cottage Hospital, Santa Barbara; Richard D. Evans, M. D.; H. J. Ullmann, M. D., 22 West Micheltorena Street, Santa Barbara.

Blair Bell has reported 22 per cent arrests of growth for one to five years in hopelessly advanced carcinoma by treatment with colloidal lead. By its use we have noted liquifaction of tumor tissue at necropsy, as well as a marked anemia and evidence of liver and kidney damage. Charts and photomicrographs will be presented, illustrating these changes. Because of this effect on normal tissues, colloidal trilead phosphate has been lately used with as marked an effect on the tumor, but with little or no effect on the blood or kidney, as determined clinically.

4. *Active Immunity to Diphtheria Without Free Antitoxin in the Blood Stream*—W. H. Kellogg, M. D., 970 Chestnut Street, San Francisco.

As a result of tests by both the Schick and the Kellogg methods, it has been observed that individuals previously immunized with toxin-antitoxin frequently give negative Schicks and positive Kelloggs.

Tests made on individuals reacting in the manner above described have shown that when no antitoxin is present in the blood at the time of applying the Schick test, they give a negative Schick and quickly develop a titratable amount of antitoxin.

The author's conclusion is that a state of latent antitoxic immunity exists in these persons.

5. *Comparison of Kahn Flocculation Test, the Meinicke Precipitation Test, the Kolmer-Wassermann Test, and the Ruediger-Wassermann Test*—E. H. Ruediger, M. D., 918 Taft Building, 1680 North Vine Street, Hollywood.

Parallel Kahn flocculation tests, Meinicke precipitation tests, Kolmer-Wassermann tests, and Ruediger-Wassermann tests were done on the same specimens. The Ruediger-Wassermann test gave the largest number of positive results. As compared with the Ruediger-Wassermann test the Kahn flocculation test missed 27 per cent of the positive results, the Meinicke precipitation test missed 27 per cent of the positive results, and the Kolmer-Wassermann test missed 27 per cent of the positive results. Most of the specimens on which the results disagreed came from cases of treated syphilis.

6. *On Councilman's Laflauri*—Rawson J. Pickard, M. D., 712 Watts Building, 520 E Street, San Diego.

The writers of textbooks add confusion to the difficulties of diagnosing human parasitic amebae by including the description of councilmania with that of the others. Report of cases tending to show the pathogenic importance of this ameba.

PEDIATRICS SECTION

ANDREW J. THORNTON, M. D., Chairman
405 Electric Building, 861 Sixth Street
San Diego

FRANCIS SCOTT SMYTH, M. D., Secretary
University of California Hospital
Fourth Avenue and Parnassus Street
San Francisco

FIRST MEETING

Music Room, Biltmore Hotel
Wednesday, April 27, 2:30 p. m.

1. Chairman's Address: *Progress in Pediatrics*—A. J. Thornton, M. D., 405 Electric Building, San Diego.

Rapid advance of pediatrics in recent years, due to the application of scientific research in biochemistry, nutrition, and bacteriology. Problem of infant feeding more clearly understood now because of the influence of such men as Marriott, McCollum, Gerstenberger, etc. Recent knowledge of contagious diseases has greatly reduced morbidity and mortality from these diseases. Other advances in the field of pediatrics are discussed.

2. *Studies in Rickets*—Henry J. Gerstenberger, M. D., Professor of Pediatrics, Western Reserve Medical School, Cleveland, Ohio. (By invitation.)

Discussion opened by William Palmer Lucas, M. D., and Henry Dietrich, M. D.

3. *Management of Juvenile Diabetes, with Special Reference to Cases under Treatment for Long Periods*—James W. Sherrill, M. D., Scripps Metabolic Clinic, La Jolla.

Discussion opened by Howard West, M. D., and Francis Scott Smyth, M. D.

This paper deals with the management of diabetes mellitus with a final report of sixty-five living children under treatment from one to twelve years.

A comparison is made between the diets of the diabetic child and the normal child, likewise the changes in height and weight. The opportunities for normal existence for the diabetic child are on a par with those of the normal child when carefully supervised diabetic treatment is carried out. Gain and loss of tolerance with various types of diet. Importance of the regulation of body weight of the diabetic child.

4. *Urological Affections in Infants*—Robert V. Day, M. D., 104 Detwiler Building, 412 West Sixth Street, Los Angeles.

Discussion opened by Herman L. Kretschmer, M. D.

1. Importance. 2. Incidence. 3. Criteria for guidance in the determination of what cases to subject to major, or even minor, urologic examination. 4. Some of the urologic affections of the child; pyelitis, calculus disease, enuresis, renal tuberculosis and various obstructive conditions as congenital valves in the posterior urethra, stenosis of the urethra or ureter, diverticulum, etc. 5. Technical methods of examination and diagnosis, and a brief discussion of modern children's cystoscopes. 6. Case reports.

5. *Perifocal Infiltrations in Juvenile Tuberculosis*—Ernst Wolff, M. D., Physicians Building, 516 Sutter Street, San Francisco.

Perifocal infiltrations are reparable inflammatory processes around tuberculous foci in lung tissue and glands caused by the toxins of the Koch bacillus. The literature is reviewed regarding clinical and pathological signs and the question of differential diagnosis from nontuberculous processes. The histories of two children who show pathological changes belonging to the secondary stage of tuberculosis after the classification of Raute are discussed in which the diagnosis perifocal infiltration was made and in which the processes cleared up.

SECOND MEETING

Clinic at Anita Baldwin Hospital for Children

Thursday, April 28, 2 p. m.

Directions for reaching Anita Baldwin Hospital: Walk two blocks south on Olive Street to Seventh Street, and take "J" car going west. Get off at Fourteenth Street in front of the hospital.

1. *Presentation of Cases*—Alfred J. Scott, Jr., M.D., 900 California Medical Building, 1401 South Hope Street, Los Angeles.

The rheumatic heart of school children through various stages of disease, as affecting the heart muscle is discussed. Demonstration of cases.

2. *Prognosis of Heart Disease in Children*—Alfred Washburn, M.D., University of California Hospital, Fourth Avenue and Parnassus Street, San Francisco.

The importance of prognosis—the inadequacy of our knowledge. The prognosis is influenced by early diagnosis, foci of infection and recurrent rheumatism as well as by our ability to determine the extent of the damage done. Treatment, including supervised rest and exercises, medication and morale, not only alters the prognosis, but offers many opportunities for gaining greater insight into the prognosis.

RADIOLOGY SECTION

JOHN W. CROSSAN, M.D., Chairman

522 Westlake Professional Building

2007 Wilshire Boulevard, Los Angeles

ROBERT FRANCIS KILE, M.D., Secretary

Stanford University Hospital, San Francisco

FIRST MEETING

Auditorium Building

Monday, April 25, 2:30 p. m.

1. *Secondary Radiation*—Professor Watson (California School of Technology), Los Angeles.

2. *Cholecystography*—R. G. Van Nuys, M.D., 434 Oakland Bank Building, Broadway at Twelfth Street, Oakland.

Literature of 1926 reviewed. Paper written not because of large number of cases followed through to operation, but to encourage roentgenologists outside the large clinics to use the intravenous method. This need not be a hospital procedure. Contentions are made that the smaller laboratories have more time and can better use intravenous method than the larger clinics. It is suggested that some observations may be made that are overlooked by the larger clinics. The choice of method should often be left to the roentgenologist. To bring about the finer aspects of diagnoses, more work must be done in establishing the normal. The test is in its infancy and progress can be looked for yet, so that the surgeon can rely upon the examination more fully than he can upon inspection and palpation at operation.

3. *Comparative Value of Gastrointestinal Series and Cholecystography in Diagnosis of Gall Bladder Disease*—John D. Lawson, M.D., Woodland.

Previous to the advent of the work of Graham, Cole, and Copher the diagnosis of cholecystic disease was entirely dependent on so-called secondary findings which were either organic or functional signs produced by gall bladder disease. The work of Law, Cole, George, Burnham, and others stressed very greatly the value of so-called secondary findings, while Carman, Moore, and others disputed the value of these findings. Following the advent of cholecystography we have had an impetus added to the radiological study of the right upper quadrant,

resulting in many varied statements as to the criteria of diagnosis and the value of diagnosis. In the opinion of the writer both methods of investigation are valuable and have their place in diagnosis. The report is based on a series of 500 gastrointestinal examinations by barium meal and 100 examinations of the gall bladder by cholecystography.

Discussion on above two papers opened by Charles G. Sutherland, M.D., Mayo Clinic, Rochester, Minn.

4. *Valuable Aid in the X-Ray Diagnosis of Intestinal Obstruction*—Kenneth S. Davis, M.D., St. Vincent's Hospital, Los Angeles.

Discussion opened by Harry H. Heylum, M.D., Long Beach.

When the slides are shown, the value of a "scout" roentgenogram in determining the site of obstruction can easily be seen. Unfortunately, as has already been stated, the procedure is valueless unless the obstruction is complete, for we do not find the markedly dilated intestine ballooned out with gas in those cases in which there is only a partial obstruction. In two of the cases in my series, the "scout" roentgenogram was negative, but the motor meal series showed an obstructive lesion in the small bowel. Cases of obstruction in very young infants apparently cannot be diagnosed by this method. There has only been one such case in my series, the roentgenographic findings being indeterminate for the site of the obstruction. Fortunately in this case the barium enema revealed the nature of the lesion—an atresia of the colon.

5. *Diagnosis of Tuberculous Cavities*—Merl L. Pindell, M.D., Olive View Sanatorium, San Fernando.

Discussion opened by Carl H. Parker, M.D., Pasadena.

1. All sizes of cavities, irrespective of their location, are usually diagnosed promptly by the roentgen ray. 2. Cavities heal more frequently than we formerly thought. 3. Annular shadows demonstrated on films of tuberculous patients are practically always due to cavitation, therefore all annular shadows present on such films should be considered cavities until proven otherwise.

SECOND MEETING

Auditorium Building

Tuesday, April 26, 2:30 p. m.

1. — Charles G. Sutherland, M.D., (Mayo Clinic), Rochester, Minnesota.

2. *A Closer Relation Between the Surgeon and Roentgenologist*—J. C. Robertson, M.D., 1003 Twelfth Street, Modesto.

Discussion opened by William T. Lum, M.D., Alameda.

An x-ray picture so called is not a picture, but a shadow. A shadow is proof merely of outstanding density of elemental substances. These shadows are formed by substances through which the rays do not penetrate entirely. To the roentgenologist they may mean a pathological condition, but he cannot visualize tissue as it is macroscopically. To the surgeon he is on the opposite side. He can visualize tissue not mal and pathological, but must have first-hand knowledge by the guiding hand of the roentgenologist to know the extent of disease by a mere shadow.

3. *Sphenoid Pathology from the Roentgenologist Standpoint*—D. Grant Clark, M.D., 1520 Chapala Street, and H. J. Ullmann, M.D., 22 Micheltorena Street, Santa Barbara.

Discussion opened by Robert A. Powers, M.D., Palo Alto.

Sinus infection is a frequent source of focal infection in cases of systemic disturbance. We believe the sphenoidal sinuses are commonly involved with or without changes in the other sinuses, and that by the Granger technique the sphenoidal changes may be very accurately demonstrated by the roentgen ray.

4. *Ossifying Hematoma (An Illustrative Case)*—James B. Bullitt, M.D., Garden City Bank Building, San Jose.
Discussion opened by R. G. Taylor, M.D., Los Angeles.

The case: A high school boy of 18 received a heavy blow (probably a kick) on inner side of femur just above condyle. Pain and swelling immediately, followed by hard bonylike tumor in one month's time. Tumor movable, partly fixed, as though hinged. X-ray showed bony tumor mass, of irregular density, lying in soft tissues in inner side of femur, and attached to femur for distance of two inches. Surgical removal showed irregular bony mass lying in soft tissues and attached to inner border of femur. Myositis ossificans circumscripta, rider's bone, ossifying hematoma—related processes; the latter found almost exclusively in athletes following a single violent trauma. Theories of production of myositis ossificans circumscripta—the formation of bone in general in soft tissues not directly derived from bone or periosteum.

Limitations of ordinary roentgen studies of the heart (roentgenogram, orthodiagram, teleroentgenogram). For exact diagnosis of valvular lesions we need information concerning volume changes in the various chambers of the heart. Practical skiagraphy, the graphic analysis of movements of heart borders, has been made possible by the roentgen cinematograph of Ruggles.

5. *X-Ray Studies of the Heart Beat*—W. Edward Chamberlain, M.D., Stanford University Hospital, Clay and Webster streets, San Francisco.

THIRD MEETING

Auditorium Building

Wednesday, April 27, 2:30 p. m.

1. *Radiation Therapy in Hyperthyroidism*—William E. Costolow, M.D., 1407 South Hope Street, Los Angeles.

Discussion opened by John W. Crossan, Los Angeles.

The success of radiation therapy in thyroid disease depends upon the proper selection of cases. Nontoxic goiters and toxic adenomata should be treated surgically. The so-called exophthalmic type (hyperthyroidism) should receive radiation therapy. The consistent reports from clinics throughout the world prove the results in these cases to be as good as the best surgical results and without mortality.

2. *Lymphoblastoma*—Harold B. Thompson, M.D., Seattle, Washington.

Discussion opened by W. Edward Chamberlain, M.D., San Francisco.

Review of literature relative to frequency and unusual manifestations. Deductions from author's series of twenty-four cases. Conservative radiation therapy compared to extensive surgical procedures. Case reports showing unusual distribution of lesions in lymphosarcoma and unusual reaction to x-ray therapy in Hodgkin's disease. Conclusions.

3. *Bone Tumors*—William B. Bowman, M.D., Brockman Building, 520 West Seventh Street, Los Angeles, and Lowell S. Goin, M.D., 400 South Kenmore Avenue, Los Angeles.

Discussion opened by Lloyd Bryan, M.D., San Francisco.

1. Origin of the tumor. 2. Presence or absence of bone production. 3. Condition of the cortex. 4. Invasion of adjacent tissues.

UROLOGY SECTION

H. A. ROSENKRANZ, M.D., Chairman

1024 W. P. Story Building, 610 South Broadway
Los Angeles

SPENCE DE PUY, M.D., Secretary
532 Fifteenth Street, Oakland.

FIRST MEETING

Auditorium Building

Monday, April 25, 2:30 p. m.

1. Chairman's Address: *Some Remarks on the Art and Science of Urology*—H. A. Rosenkranz, M.D., 1024

W. P. Story Building, 610 South Broadway, Los Angeles.

2. *Hemangioma of the Prostate*—Francis H. Redewill, M.D., Flood Building, San Francisco.

First reported case of this unusual condition. Microscopic pathology. Treatment unsatisfactory.

3. *The Surgical Prostate*—Louis Clive Jacobs, M.D., 462 Flood Building, 870 Market Street, San Francisco.

Surgical complications manifested in a review of 250 consecutive cases.

1. Postoperative hemorrhage: the prophylaxis against, blood examination, pharmacal and mechanical methods of prevention. Use of coagulating media.

2. Fistula: etiology, clinical course, treatment. 3. Epididymitis: incidence and treatment.

4. *Aberrant Renal Artery*—Franklin Farman, M.D., 709 California Medical Building, 1401 South Hope Street, Los Angeles.

A general discussion of the anomalies of the renal vessels, with report of one interesting case.

Discussion opened by Adolph A. Kutzmann, M.D., 403 Professional Building, 1052 West Sixth Street, Los Angeles.

SECOND MEETING

Auditorium Building

Tuesday, April 26, 2:30 p. m.

1. *Phleboliths*—James R. Dillon, M.D., 301 Medico-Dental Building, 490 Post Street, San Francisco.

A review of the x-ray films in the Stanford Hospital x-ray laboratory showing phleboliths, with a study of their relationship to urinary tract disease, from the complaint, history, symptoms, and examination of the patient. Literature and conclusions.

2. *Infection of the Prostate and Seminal Vesicles and Its Relation to Backache*—Miley B. Wesson, M.D., 1275 Flood Building, 870 Market Street, San Francisco.

Discussion opened by Thomas Stoddard, M.D.

Backache of interest to all who employ labor, as it is responsible for keeping up liability insurance premiums. Bony changes that have taken place in the spine cannot be repaired, but if the focus of infection responsible for the arthritis can be eradicated the pain will disappear, and the man can be put back to work. Urological investigation of large series of cases with low-back pains disclosed an infection in the genitourinary tract, and as soon as free drainage of the infection was established the backache disappeared.

3. *Unusual Urinary Calculi*—William E. Stevens, M.D., Flood Building, 870 Market Street, San Francisco.

The subject of urinary calculi has always been of interest to the physician. Report of an enormous coraliform calculus of the kidney without subjective symptoms. A case of bilateral giant ureteral calculi. False and true prostatic calculi. Multiple ureteral calculi. Calculi in the female urethra.

4. *Tumors of Bladder*—J. C. Negley, M.D., 819 Haas Building, 219 West Seventh Street, Los Angeles.

Resumé of cases treated by various methods at Los Angeles General Hospital. Value of different methods of treatment as resection, Percy cautery, surgical diathermy or fulguration, x-ray and radium.

THIRD MEETING

Auditorium Building

Thursday, April 28, 2:30 p. m.

1. *The Cause of Renal Back Pressure in Obstructive Lesions of the Urethra*—Henry A. R. Kreutzmann, M.D., 1195 Bush Street, San Francisco.

1. Hydroureter and hydronephrosis may occur as result of kinking of ureters by vas deferens. 2. Obstructive lesions of bladder neck most common cause upper urinary tract dilatation. 3. Reflex not uncommon and not a primary phenomenon of prostatic hypertrophy and ureteral stricture.

2. *Renal Surgery: Its Pitfalls and Complications*—Charles P. Mathé, M.D., 844 Phelan Building, 760 Market Street, San Francisco.

Study of following complications for the purpose of preventing them and lowering the mortality. Shock, hemorrhage, phlebitis, embolus, fistulae, infection of renal fossa, uremia, anuria, myocardial complications, peritonitis and pneumonia.

3. *Jaundice Caused by Movable Kidney*—Albert J. Scholl, M.D., 721 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

Transient attacks of jaundice may be caused by movable kidneys. They are probably dependent upon the dragging of folds of peritoneum on the

duodenum or common bile ducts, direct pressure on the biliary system or from a perinephritis which involves liver and ducts.

4. *Ourselves*—G. Shearman Peterkin, M.D., 1102 Cobb Building, Seattle, Washington.

A thesis the subject of which is, "Are we scientists who, as producers of scientific knowledge in the form of skilled intelligence, are selling our knowledge to the buying public; or, are we simply members of a profession who, still hypnotized by iron-bound customs and moss-covered traditions of the past, believe we are superior to our fellow-man, therefore they should accept that which we see fit to dispense?"

Entertainment

Motion Picture Program

Auditorium, Pacific Mutual Building

Monday and Wednesday Evenings, 7:30 p. m.

"Life of Pasteur." Six reels dealing with the life and discoveries of this noted scientist. This film is the gift of the French Government to the United States Department of Agriculture and loaned to us for use at this meeting.

"Pathology and Classification of Gastric Ulcer" and "Pulmonary Tuberculosis," two films by Lewis Gregory Cole of New York City dealing with the above subjects from the standpoint of physicians, surgeons, pathologists and roentgenologists. These films are said to be some of the best motion pictures made.

"New Ways for Old," a treatise on the prevention of diphtheria, depicting developments in the care of diphtheria that are typical of the progress of medicine. "One Scar or Many," the story of vaccination prepared under the supervision of Dr. M. J. Rosenau, Professor of Preventive Medicine at Harvard University. Both of the above films loaned to us by the Metropolitan Life Insurance Company.

"Interstate Postgraduate European Assemblies of 1926" illustrates this method of postgraduate study. The 1926 tour included clinics at Paris, Rome, Milan, Padua, Pisa, Bologna, Florence, Zurich, Berne, Munich, Vienna, Prague, Berlin, Amsterdam, Leyden, Utrecht, the Hague, and Brussels. The following Californians accompanied this tour. Dr. Newell H. Bullock, San Jose; Dr. Ruby L. Cunningham, Berkeley; Dr. Rubie M. Durgin, Berkeley; Dr. T. B. W. Leland, San Francisco; Dr. Clarence E. Reed, Redding; Dr. F. E. Sohler, Healdsburg; Dr. Henry Snure, Los Angeles.

"Posture," a two-reel picture made under the supervision of Dr. Armin Klein at the posture clinic of the Massachusetts General Hospital. A film intended for physicians, physical education teachers, athletic directors, recreation leaders, etc. This film loaned to us by the Children's Bureau of the United States Department of Labor. Their latest release, "Sun Babies," will also be forwarded to us if completed in time for the meeting.

"The Science of Life," one of the most expensive scientific films ever produced and used often by the American Medical Association. Produced under the direction of the

Surgeon-General, United States Public Health Service. The most advanced knowledge, skill and equipment have been used unsparingly in its production with outstanding success. As an instructional motion picture it establishes a new high standard of achievement. As a contribution to general health education it is incomparably valuable. Don't miss this one, a *whole medical meeting in itself*.

These films will be shown in two evening sessions, approximately three hours each, by Henry Snure, M.D., Los Angeles. Program will begin promptly at 7:30 p. m. No discussion permitted. Ladies welcome.

Entertainment Features

The annual banquet will be given in the ballroom of the Hotel Biltmore on Thursday evening of the convention week, and it is hoped will bring the days of the scientific program and sightseeing activity to a charming close.

This banquet will be not so much a formal dinner, as a supper dance. Members who were present at the last Los Angeles meeting will remember the jolly atmosphere of the informal entertainment and dancing. We hope the 1927 dinner dance will be even more pleasing.

There will be no speeches, but it is hoped to have as many as possible of the living *ex-presidents* of the California Medical Association at President McArthur's table.

Visiting members will be given the first preference for tables and seats; they should sign the application book and secure seats not later than 6 p. m., Tuesday. On Wednesday morning the sale of tables and seats for Los Angeles city members will begin. Los Angeles City members can, however, pay for their reservations on Monday and Tuesday and secure their tickets on Wednesday and Thursday.

It is planned to have several auto trips, and arrangements will be made to visit one or more of the movie studios.

The time and place of fraternity and college alumni banquets will be announced on the bulletin boards and in the daily convention bulletin.

Women's Reception Committee

Executive Group

Mrs. William T. McArthur, Chairman

Mrs. Robert V. Day
Mrs. William Duffield
Mrs. Donald J. Frick
Mrs. Hill Hastings

Mrs. William H. Kiger
Mrs. George H. Kress
Mrs. Theodore C. Lyster
Mrs. Peter R. McArthur
Mrs. Robert P. McReynolds

Dr. J. Margaret Roberts
Dr. Eleanor Seymour
Mrs. Harlan Shoemaker
Mrs. Clarence G. Toland

The City of Los Angeles

LOS ANGELES is notable among cities of the world for its beauty, its magical growth in population and commerce, its happy, energetic people and their vision in planning for its future.

It is one of the most typically American communities in the land today. Its residents come from the best elements in various sections. Many have had success elsewhere. All bring judgment gained in past experiences. They represent the Main Streets of the United States.

Every state in the Union has proud sons and daughters taking active part in the development of the young metropolis on the western shore of their country. Their varied contributions in education, finance, art, science, business and plain straightforward work, are of inestimable value. The rosters of the great local state societies reveal names well known in former homes. These families made history in staunch old New England, in the chivalric South, in the substantial Middle and Central states and the Western states of pioneer days, and now their descendants are making modern history on the Pacific Coast the last frontier.

In 1781, twelve years after Padre Junipero Serra founded the Mission San Gabriel Archangel in the San Gabriel Valley near by, 141 colonists from Mexico settled here and named the village La Ciudad de Nuestra Senora la Reina de Los Angeles, The City of Our Lady the Queen of the Angels. Half a century later there were but 770 inhabitants. At the end of 1926 there were 1,300,328 within the city limits. Los Angeles had grown from a pretty pueblo to a great city. Its metropolitan area is 434.22 square miles.

Apropos of the above paragraph, an excerpt from an illustrated article in the *Los Angeles Express* of March 22, 1922, may be of interest because it sheds additional light on how Los Angeles came to receive its original name.

"The Church of St. Francis in the Italian city of Assisi and Los Angeles seem to be a far cry apart, the one unrelated to the other, geographically, historically and racially, and yet, with the exception of race, the two are closely related, for the Italian Our Lady the Queen of the Angels of the Portiuncula is the godmother of Our Lady the Queen of the Angels of the Portiuncula, shortened to our own Los Angeles.

"And if one would envisualize the scene that met the eyes of the Franciscan padres as they trod what was to become the famed King's highway when they bestowed the name on this locality, this may be achieved, paradoxical as it may appear, in one of the English etchings at the international salon of the print makers now being held in Exposition Park. For W. Wesley Manning's etching, 'The Church of St. Francis of Assisi,' shows the god-mother church for which Los Angeles was named and also the marked resemblance of the plain of the Portiuncula adjoining the little town of Assisi to the San Fernando Valley as seen from what is now the North Broadway entrance of Elysian Park.

"The Portiuncula River meanders down just such a valley as does our own much-maligned Los Angeles River, and it was because of this resemblance, and because the padres arrived in what is now Los Angeles on the eve of the indulgence of the Portiuncula in 1769, that Los Angeles was given the name of Our Lady the Queen of the Angels of the Portiuncula, and the river was christened the Rio Portiuncula, being known by that name until the arrival of the gringos, who changed it to the more easily pronounced Los Angeles River."

Its commanding position at one of the world's cross-roads points is chiefly responsible for the city's swift development as a commercial center. Great have been the efforts of men here, but nature did more in the beginning. Foreign trade through the harbor was about doubled last year. Domestic commerce increased with similar rapidity. People poured in at the rate of 10,000 a month.

More than ever must be done to meet the demands made by these sudden gains in business opportunities and

population. What has been lately accomplished is tersely set forth hereafter.

Building

Last year 37,478 building permits were issued, aggregating \$123,006, 215.

Only four cities surpassed Los Angeles. They were New York, Chicago, Detroit, and Philadelphia.

Many of the downtown buildings erected are notably handsome and artistic. The new churches, theaters, and clubs are distinguished for their architecture. Los Angeles homes are noted for their smartness and elegance. The bungalows are charming and surrounded by blooming shrubs and flowers. Some large homes are palatial. Perfect residence types of various countries and periods may be seen, correct to the smallest detail.

Civic Center Plan

A magnificent plan for an immense cultural and administrative center has been completed. The engineers submitted and considered 875 sketches before making a decision.

A vast area is involved. The project is astounding in magnitude and entrancing in beauty. It involves twelve plazas, a vast passenger terminal, splendid esplanades, radial street arteries connecting with every main highway, east and west streets on grade and north and south streets depressed to eliminate entirely crossings. All public buildings will be assembled handsomely with many practical and artistic features, and made easily accessible from all points of the city and county. The historic old Plaza and Plaza church will become part of the prodigious new project. An old section of the city will be rejuvenated and glorified. The downtown traffic congestion will be greatly lessened by fitting this big center scheme into the colossal Major Traffic Plan which involves a \$100,000,000 expenditure and covers the entire city area of 415 square miles.

Large betterments included: Major Traffic Plan approved by vote of the people, to cost \$100,000,000 and first bond issue of \$5,000,000 to inaugurate plan authorized; a \$33,640,000 school bond issue voted and work started on 110 elementary schools and sixteen high schools; proceedings begun for erection of a \$7,500,000 city hall; and \$16,000,000 voted for extension of the city's municipal hydro-electric system.

Other important plans are being considered and will no doubt be perfected during 1927. Los Angeles is well aware of its future needs and determined to make adequate provisions for them.

Superb Climate

Nature has endowed it with a year 'round climate which makes it not only the mecca annually for millions of tourists, but ideal as a convention center. Situated as it is, in a state with almost as great a variety of climates as may be found in the world, it enjoys a happy medium between two extremes of heat and cold.

The thermometer rises to 100 degrees on an average of less than one day a year. There are on an average only twelve days a year when a temperature of more than 90 degrees is registered.

Southern California has more perfect days during the year for out-of-door sports than any other part of the country. Days of cloudless skies come and go; summer glides into winter without perceptible effort, and winter is heralded by a cloak of green, flung over the hillsides by the first rains of autumn. Mornings, evenings and nights are cooler, but delicate rosebushes, burdened with blossoms, are seldom touched by frost.

This equable year 'round climate, combined with the great variety of scenery in southern California, governed the selection of Los Angeles County as the center of the motion picture industry. Eighty-five per cent of the world's output of films are produced here.

Those visiting Los Angeles can, on almost any day in the year, find motion picture companies on location in



The heart of downtown Los Angeles. Half a century ago this part of the city was an orchard

or near this bustling metropolis and catch a glimpse of his or her favorite star. This alluring feature alone brings thousands of tourists to southern California. But Los Angeles holds out innumerable other lures to the vacationist.

Yachting and Fishing

Thirty miles off the coast lies enchanted Santa Catalina Island with its picturesque Avalon Bay, a magnificent hotel, a yacht club, golf club and many attractive homes. Excursion steamers ply regularly between the island and Los Angeles-Long Beach harbor, and great fleets of private yachts may be seen at all times, cruising across the intervening channel and around the island.

Catalina, with its sister islands of San Clemente and Santa Barbara, make up the world-famous chain of Channel Island so rich in old Indian lore and romance of early Spanish conquest. Southern California waters are the year 'round rendezvous of many eastern yachtsmen.

This great protected channel is also a veritable paradise for salt water fishermen. Frank Gray Griswold, in his book, "Some Fish and Some Fishing," tells of landing giant sea bass off the Catalina coast weighing 493 pounds, swordfish weighing 463 pounds, marlin or spearfish weighing 372 pounds, and tuna, yellowtail and albacore of varying weights. This channel is one of only two places in the world where tuna are to be found.

Public Beaches

Of southern California's 274-mile coast line, 85 miles lie in Los Angeles County. Nine-tenths of the county's population lives within 30 miles of the ocean.

Extending from north to south along the county's coast line are many attractive little cities. Santa Monica spreads over the foothills of the mountain range which bears its name, and commands a superb view of the mighty Pacific. This city, with Ocean Park and Venice, comprise the Bay District cities, world famous for their pleasure piers and miles of public beaches. The Coast Highway, running from the Canadian to the Mexican borders along the Pacific Ocean, connects these cities with Playa del Rey, El Segundo, Manhattan Beach, Hermosa and Redondo.

Further south Palos Verdes rears its rolling terrain to command an excellent view of the Pacific. Behind it lie the great guns of the coast artillery at Fort McArthur.

A World Port

Los Angeles years ago sensed the destiny it was to fulfill, and reaching out over the 20 miles between itself and the harbor district of Wilmington and San Pedro, joined hands with those cities and its sister city, Long Beach, in constructing one of the world's finest ports, which now ranks second among American ports, in point of cargo landed.

This great man-made harbor is not only the gateway of the Pacific Southwest to world markets, but it is the home of Uncle Sam's mighty armada of battleships in the Pacific.

Long Beach, in addition to its bustling harbor and industrial district, has miles of public beaches and its "Pike" is world famous for its amusement devices.

Artist's Paradise

Still further south along the coast line, and nestling in a cluster of picturesque mountains is Laguna Beach, noted for its artist colony. Along its sandy beach and among its rugged crags one can always find some of the nation's foremost wielders of brush and pen at work.

Close by is the Mission of San Juan Capistrano, rich in the lore of early Spanish days. Picturesque Lake Elsinore nestles between two neighboring mountain ranges, on the inland route between Los Angeles and San Diego.

The Sierras

Tiring of beach scenery and aquatic sports, one can travel within an hour's time, to the very feet of the towering Sierra Madre through whose wooded fastness wind

miles of motor highways, bridle paths and hiking trails. Within the confines of this mighty range which stands as an eternal challenge to the prowess of youth, millions of people can play without disturbing their own silence.

Oranges and Snow

While these towering peaks are cloaked in snow, the fertile valleys spread at their feet are green with the great variety of crops which the southland boasts. In these intensively cultivated valleys one can see at any time of the year, orange trees blooming and bearing at the same time. Here also oil derricks rear their gaunt forms skyward between symmetrical rows of citrus trees, drawing from the very bowels of the earth that "black gold" which rivals in production and value the golden fruit which makes California famous.

Golf and Tennis

Scattered throughout southern California and within convenient distance of Los Angeles are forty-two golf courses with grass greens and fairways. Facilities are also provided at the numerous country clubs for tennis, polo and other out-of-door recreations. The equable climate of the sunny southland permits year 'round participation in all these sports.

From Pasadena, "the city of millionaires," one can travel by interurban to Alpine Tavern on Mount Lowe, or by stage or automobile to Mount Wilson. Mount Lowe is world famous for its incline railway which connects Rubio Canyon with Echo Mountain, where an observatory, open to the public, is located. Mount Wilson, on whose wooded crest stands a tavern to which thousands of motorists and hikers journey annually, is also famous for the Carnegie Institute solar observatories located there.

Camps and Parks

Picturesque canyons extend into the mountains from Arcadia, Sierra Madre, Monrovia, Azusa, Glendora and Claremont, through which runs Foothill Boulevard.

Los Angeles County owns numerous public parks where campers are provided with every possible comfort. McClellan Park, a 5640-acre tract on the northern slopes of the San Gabriel range, is now open to the public. Every city in the county maintains parks and camp grounds for the benefit of visiting motorists.

Los Angeles City itself possesses a park system of which it is justly proud. In all it owns forty public parks aggregating 4470 acres. Griffith Park, located in the mountains between Los Angeles and Glendale, has many miles of scenic drives which are a constant source of pleasure to motorists and hikers. Here the city maintains a number of excellent golf courses.

Exposition Park, containing the State Exposition buildings, the Coliseum, the Museum of Science and Art, and the famous Sunken Gardens, is renowned for the historical and art collections its buildings house, as well as the athletic and community events staged in the Coliseum.

Southwest Museum, housing still another collection of scientific materials, stands on a hill overlooking downtown Los Angeles and Scyamore Grove with its collection of trees contributed by every state in the Union. Here the various State Societies of Los Angeles hold their reunions and picnics regularly throughout the year. Westlake, Echo and Lincoln parks provide boating and canoeing facilities. The latter contains a conservatory housing an excellent collection of plants from all over the world. Elysian Park, in the heart of the city, is noted for its flower-bordered drives.

With well justified pride in its superb all-year climate, Los Angeles has erected in Exposition Park a great Coliseum capable of seating 80,000 people. In it the 1932 Olympic Games will be played. It is also the scene of many community events during the year and here a capacity crowd gathers each Easter morning to greet the sunrise with appropriate services.

Nestling in the picturesque hills of Hollywood, world-famous motion picture center, is Hollywood Bowl, a na-



Midwick Country Club, one of many near Los Angeles, on whose grass greens Angeleños play golf the year 'round

tural amphitheatre, which is the scene of open-air symphonies throughout the year and an impressive Sunrise Service each Easter. Close by in another natural amphitheatre the Pilgrimage Play—the Oberammergau of America—is staged annually.

In Pasadena is the famous Tournament of Roses Bowl, the scene of many open air events, principally among which is the annual East and West football championship game, played at the close of the Rose Parade each New Year's Day.

Early Romance

The Mission Play, the product of the pen of John Steven McGroarty, is staged throughout the summer months at San Gabriel near Los Angeles, in the shadow of the old San Gabriel Mission. It depicts the early struggles of the Franciscan monks under Fra Junipera Serra to plant Spanish civilization on Pacific shores. It teaches the tourist the true significance of such immortal names as Don Gaspar Portola, Juan Rodriguez Cabrillo and others whose lives are linked inseparably with the colorful history of California.

El Camino Real, or "The King's Highway," linking together in one romantic chain the Missions from San Diego to Sonoma, traverses the length of Los Angeles County and joins within the confines of this miniature empire the missions of San Gabriel, Los Angeles, and San Fernando.

Los Angeles boasts an array of theaters rivaling in architectural beauty, those of any other city. Its Chinatown with its weird Oriental customs and ceremonies, is a constant source of interest to tourists.

To the sport fan Los Angeles offers year 'round auto races at Culver City and Ascot speedways. It is also well equipped with baseball grounds, many major league teams maintaining winter training quarters in the vicinity of the city.

Cawston ostrich farm, two alligator farms, Seelig's Zoo, and Gay's lion farm in El Monte, near Los Angeles, are always a source of interest to visitors.

What wonder then that Los Angeles, with such an array of points of interest, is the mecca annually for millions of tourists and the ideal center for conventions of all kinds.

Hospitals and Health Agencies of Los Angeles City and County

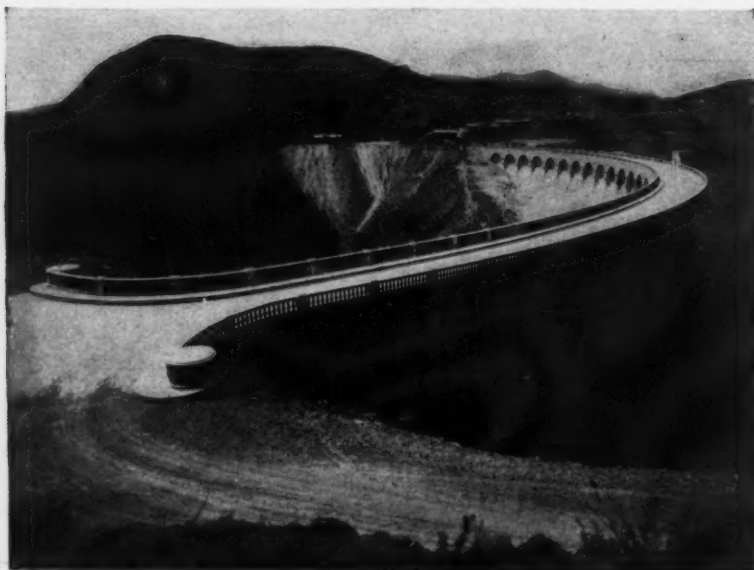
The Angelus Hospital is located at 1925 Trinity Street (at Washington) and was organized in 1905. Has a capacity of 120 beds. Surgical and obstetrical cases comprise the bulk of the service. The superintendent is Miss Marie A. Wooders. The staff is an open one, made up of members of the Los Angeles County Medical Association and those eligible to same.

The Barlow Sanatorium is located at 1301 Chavez Ravine Road, Los Angeles. It consists of nine central service buildings, including infirmary, recreation hall and library. Seventeen modern four-room cottages and five two-room cottages for patients; number of beds, eighty. Only early cases of pulmonary tuberculosis are admitted. The staff officers are: W. Jarvis Barlow, M. D., director; Munford Smith, M. D., medical director; and P. J. Byrne, M. B., Ch. B., resident physician, to whom applications for admission should be made. Nursing School: Three and four-month courses are given to postgraduate nurses and affiliates from general hospitals.

The California Lutheran Hospital, 1414 South Hope Street, invites Convention visitors to inspect its new, modern, nine-story, 300-bed hospital building. The top floor is of special interest, having seven operating rooms, a cystoscopy department, a large diagnostic x-ray department under direction of Henry Snure, a deep therapy department conducted by Albert Soiland, and a complete clinical laboratory operated by Doctors Brem, Zeiler, and Hammack. This hospital is successor to the well-known California Hospital established in 1897 by Walter Lindley, W. W. Beckett, F. T. Bicknell, W. W. Hitchcock, M. L. Moore, E. R. Smith, and other pioneers in medicine and surgery in southern California.

French Hospital of Los Angeles—This institution is located at 531 College Street and was founded March 1, 1860. It owns four buildings, with a capacity of seventy-five beds. Medical, surgical and obstetrical departments are all kept up to proper standards. Mrs. Y. Clos is the superintendent.

The Hospital of the Good Samaritan, Wilshire Boulevard, between Witmer Street and Lucas Avenue was



Mulholland Dam in Hollywood, part of the Los Angeles Aqueduct System

founded in 1887. New building opened April 15, will give total capacity of 375 to 400 beds. A general medical, surgical and maternity hospital. Maintains a School of Nursing. Mrs. Horatio Walker, Jr., superintendent. The hospital is conducted under the auspices of the Episcopal Church.

Hollywood Hospital is one of the new fireproof hospitals of Los Angeles staffed with a carefully selected staff of members of the County Medical Association, having eight operating rooms, three delivery rooms, and x-ray department equipped with diagnostic and deep therapy machines, a newly furnished laboratory, a complete physiotherapy department. The rates are for the average case and extras are eliminated as far as possible. They are from \$4.50 to \$15 per day. The new wing, almost completed, will more than double the accommodations.

The Kaspere Cohn Hospital, 3942 Whittier Boulevard, Los Angeles, a constituent unit of the Federation of Jewish Welfare Organizations, was organized and incorporated in 1902. The two-story and basement brick building has a bed capacity of sixty-five beds. Dr. A. Tyroler is chief of staff, Dr. Oscar Reiss, secretary; Mrs. Kathryn Meitzler, superintendent of hospital. There is no training school in connection with the present plant, but a nurses' home is provided on the grounds for graduate nurses employed. Plans are under way for the erection of a new hospital on Fountain Avenue, Hollywood, with an ultimate capacity of 400 beds.

Las Encinas, Pasadena—Las Encinas is a sanitarium for the treatment of medical, nervous and convalescent patients, especially those with chronic illnesses. Las Encinas is Spanish for The Live Oaks, of which there is a fine grove on the grounds. An attractive, illustrated booklet has been prepared detailing the facilities for treatment. Customary treatment makes use of all therapeutic measures approved of by ethical physicians. Cottages as well as private rooms in the "main building" are available, so that rooms may be had en suite or singly, for patient alone or for family as well. Visitors are welcomed, especially any from out of town who may be in Los Angeles for the state meeting. Drive east on Colorado Street in Pasadena to San Gabriel Boulevard. Las Encinas is at 2900 Blanche Street, Pasadena.

Lincoln Hospital, 453 South Soto Street, Los Angeles, is a hospital pleasantly situated in the Boyle Heights section of the city. It was founded in 1904 under a bequest or trust that is ably administered by a group of unselfish

business men. The institution was formerly known as the German Hospital. The medical and surgical services are under the charge of Drs. P. Newmark and Carl Kurtz. The hospital has a capacity of thirty-five beds. It is open to all doctors eligible to membership in the A. M. A. The hospital maintains a resident physician. The superintendent is Mrs. Janie O'Neill.

Long Beach Community Hospital—Community Hospital of Long Beach opened its doors August 1, 1924. The slogan has been to give efficient service at cost. The hospital is located on a hill giving a view of both the mountains and the ocean. It is a mission style edifice which harmonizes in every respect with its surroundings. The buildings are constructed of concrete and tile, making it a Class A construction, having a capacity of 125 beds. The executive staff is composed of twelve doctors, with a visiting staff of 200 doctors. Miss Elsie Peacock is the superintendent.

The Los Angeles General Hospital, at 1100 Mission Road, near Lincoln Park, in the city of Los Angeles, founded in 1878, is the Los Angeles County Hospital for the acutely ill (as distinguished from the other county hospitals for the chronic at the County Farm, and for the tuberculous at the Olive View Sanatorium). This hospital cares for 1100 in-patients daily, and for more than 100,000 out-patient visits annually, under the provisions of that section of the state law commonly known as the Pauper Act. The present investment is approximately three and one-half millions of dollars, with some fifty buildings on a thirty-five acre site. It has the largest School of Nursing of any single hospital in America, enrolling at the present time 306 student nurses. The contracts have been let for the excavation and for the steel of a strictly modern acute hospital unit of 1600 beds to cost approximately \$8,000,000, to be built on the commanding site east of and overlooking the present hospital. The attending staff of the hospital includes some 200 of the leading physicians and surgeons of Los Angeles County, in addition to a house staff of some sixty interns, and twenty resident physicians. The management of the hospital will be glad to extend all possible courtesies to members of the California Medical Association who are attending the fifty-sixth annual session, and who would be interested in making a visit to this very large institution.

The Methodist Hospital of Southern California at Los Angeles is a general hospital accommodating 225 adult patients. It is a strictly nonprofit organization, as

it is owned and operated by the Woman's Home Missionary Society of the Methodist Episcopal Church. The building is absolutely modern and fireproof throughout. A full-time resident roentgenologist and pathologist are employed by the hospital, making the service of these departments, as in the others, very complete. Among the newer developments are the out-patient clinic and the physiotherapy department which are meeting a long-felt need.

Monrovia Hospital was founded August 8, 1912. Is situated at the corner of Heliotrope and Lime Avenue, Monrovia. The hospital includes three buildings, one of which is the nurses' home. It accommodates both medical and surgical cases. The superintendent is Miss Mamie Haben.

The Murphy Memorial Hospital is situated in Whittier, fourteen miles from Los Angeles. The building was a gift from the late Col. Simon J. Murphy, in 1921, being of reinforced concrete fireproof structure. It is situated in a park of about eight acres, with commanding view and beautiful surroundings. It is a 100-bed hospital, with medical, surgical, and obstetrical service. It is owned and operated by the city of Whittier, whose City Council appoint the hospital board of directors, who in turn are in charge of appointment of staff and executives. Only graduate registered nurses are employed. The superintendent is Miss Susan G. Parish.

The Orthopedic Hospital-School is located at 2400 South Flower Street, Los Angeles. Its main hospital was completed in April, 1922, bed capacity seventy-five. The medical and surgical services of its staff are restricted to orthopedic cases exclusively. The educational part of the work is furnished by the Los Angeles Board of Education. The institution is conducted by the Los Angeles Orthopedic Foundation, incorporated, to work without profit for crippled children. Mr. Preston T. Slayback is business executive. The out-patient and clinic department is conducted by the Crippled Children's Guild, an organization established for social service work for crippled children in 1913.

Pasadena Hospital Association was incorporated as a nonprofit corporation in 1922. The hospital has capacity for 244 patients, and is located at Fairmont and Congress streets. It is a limited general hospital, taking everything except infectious diseases. There are large surgical and maternity departments; and a very large endowment fund is efficiently administered through a social service department who investigate and pass on all welfare cases. An excellent nursing school is run in connection with the hospital. Mr. Joseph P. Howe is president of the Board of Directors and Mr. Wallace F. Vail is manager. Miss June Ramsey has charge of the Nursing School. The hospital is approved by the American College of Surgeons. There are thirty-two members on the senior staff. The feeling of all the groups in the hospital is that the patient comes first, and the motto of the hospital is "Service With a Smile."

The Pottenger Sanatorium for Diseases of the Lungs and Throat, Monrovia, California, has been caring for patients for twenty-three years. Its capacity is 138. While it is desirable to treat tuberculosis early, when nearly all can get well, yet the institution has never closed its doors to anyone who can be benefited. All accepted scientific measures are used—heliotherapy, tuberculin, pneumothorax, rest, and exercise carefully adjusted to each individual—and the closest personal attention is given. The psychical side of the patient is given full attention.

Queen of Angels Hospital, 2301 Bellevue Avenue, Los Angeles, was founded in October, 1926, and is conducted by the Franciscan Sisters of the Sacred Heart, Sister M. Luitgardis, superintendent. The main building is fireproof. One hundred and ten beds, all outside rooms, no wards. The hospital is completely equipped for diagnosis of both medical and surgical diseases and injuries. The staff is in process of formation. The School for Nurses in connection with the hospital is governed by the rules and regulations of the California State Board of Health.

Santa Fe Hospital, Los Angeles, California, owned and operated by the Santa Fe Coast Lines Hospital Association, Sixth and St. Louis streets. Built 1904. A general hospital of 130 beds, primarily for the care and treat-

ment of employees of the Santa Fe Railroad Coast Lines. All types of cases are cared for except obstetrical, mental and infectious. There is a closed staff of thirty-five members, and an associate staff of recommended physicians and surgeons. All graduate nurses.

Seaside Hospital of Long Beach was founded in 1907. It is located at Fourteenth Street, between Chestnut and Magnolia avenues, Long Beach. Seaside Hospital is a general hospital of 178 beds. All classes of cases are cared for with the exception of contagious, infectious, and mental diseases. It has all modern facilities. The surgery is spacious and well equipped. It has a closed staff. The Seaside Hospital School of Nursing was organized in 1918, and is accredited in California. The school facilities are excellent, and the number of students is eighty.

White Memorial Hospital, located at 312 North Boyle Avenue, Los Angeles. Founded, 1917. Ten stucco frame buildings, one and two stories. One hundred and eight beds. General rotating medical, surgical, and obstetrical intern service. Resident staff in medicine, surgery, obstetrics, pediatrics, and pathology. Out-patient department, 250 to 500 daily patient visits. Dr. P. M. Keller is chief of staff. Dr. Ethel Andre, secretary. Conducts school of nursing, three-year course, eighty students. The superintendent is Dr. H. E. Butka.

There will be a reunion of the officers of the Sanitary Train of the Fortieth Division at the University Club, 514 South Hope at 6 o'clock on the Wednesday evening of the state convention. Any who are interested, kindly get in touch with Dr. Lewis D. Remington.

CONVENTION CLINICS

A program of clinics to be held in Los Angeles and vicinity during the state convention is being compiled.

The Clinical and Statistical Section of the Los Angeles County Medical Association is publishing a daily bulletin in which is listed the medical, surgical, and special work carried on in the various hospitals of this city.

These programs will be available at the convention headquarters, the Biltmore Hotel, and at all listed hospitals. In this way each doctor will have a complete program of the next day's clinics.

The clinics during the convention week, so far as practicable, will start at 7:30 a. m. and finish at 9:30 a. m. in order that visitors may attend the convention at 10 a. m.

Programs will be presented by representative men at the following hospitals, clinics, and sanitariums: The Angelus Hospital, California Lutheran Hospital, Banksia Place Sanitarium, Eye, Ear, Nose, and Throat Hospital, Los Angeles General Hospital, The French Hospital, Hollywood Clara Barton Hospital, Hospital of the Good Samaritan, Los Angeles Maternity Service, Methodist Hospital, Orthopedic Hospital, Radium and Oncologic Institute, White Memorial Hospital, Soiland's Radiologic Clinic, Santa Fe Hospital, and Roosevelt Hospital of Los Angeles; The Pasadena Hospital of Pasadena, and the St. Mary's Hospital and Wright's Eye, Ear, Nose, and Throat Hospital of Long Beach.

The location of these various hospitals, best street-car routes to same, approximate time to allow for the trip, etc., will be posted at the registration desk.



Los Angeles is within an hour's ride of eighty-five miles of beaches

THE COMMERCIAL EXHIBIT

Dr. William R. Molony, chairman of the subcommittee on Commercial Exhibit, announces that all of the attractive and central space arranged at the Biltmore for this exhibit has been spoken for by the advertisers in CALIFORNIA AND WESTERN MEDICINE. Only advertisers in our magazine are permitted to have exhibits at the annual meetings, and such exhibits are always a source of interest to members and visitors. This year a general invitation was extended by the editor to all such advertisers as cared to accept the opportunity, to give us a short advance news item about their exhibits, and the following have responded.

Bush Electric Corporation will be glad to greet the medical profession. Twenty-seven years of business association with the medical fraternity has been our allotment in life. We wish to avail ourselves of the opportunity on this occasion to announce our appreciation of your whole-hearted and sincere support during this time.

Your consideration has been the means of our gradual growth, whereby we are placed in a better position to serve than in the past.

Our Los Angeles store is now in full swing with a line of x-ray and physiotherapy equipment and here, as well as at the San Francisco store, we maintain a force of skilled mechanics and a shop adequately equipped to care for all kind of repair on electrical medical apparatus.

Certified Laboratory Products, Glendale and San Francisco, will demonstrate their Nitrous Oxide, Oxygen, Ethylene, Intravenous and Intramuscular Medications in ampoules, in an unique exhibit well worth visiting often during the convention. Mr. Waldo M. Winger will be in charge of the exhibit to explain the high quality and merits of the products of this concern.

Clark-Gandion Company, Inc., San Francisco, extend a cordial invitation to members of the California Medical Association to visit and inspect the merchandise which they will exhibit. Mr. and Mrs. Gandion, president and vice-president of the firm, will be in attendance to greet you and explain the merits of the articles of interest.

Your cooperation makes it possible for our staff to give professional service to your patients and the public, thus eliminating incorrect and improper fittings and sales of supports, braces, corsets and other corrective articles.

The Cutter Laboratory—The new hay-fever treatment set which does not require dilution before using and which contains an excess of solution for continuation of treatment throughout the season, when indicated, will be featured by the Cutter Laboratory exhibit. Their highly purified poison oak extract "Toxok" will also be shown.

De Luxe Lamp Manufacturing Company, one of the largest therapy light manufacturing concerns in the United States is a California corporation. They have recently moved into their own factory on Long Beach Avenue, Los Angeles, fully equipped with modern machinery and appliances for the manufacture of therapeutical lighting equipment for doctors and hospitals. The large reflectors are hand-spun from flat sheets of aluminum, nearly a lost art in the United States. These polished reflectors have been popular with California doctors, thousands being in use, and De Luxe Lamps are shipped to all parts of the world.

Horlick's Malted Milk Corporation, Racine, Wisconsin, invite attention to their booth, where there will be on display the universally known Horlick's the Original Malted Milk, in powder and tablet forms, and also Horlick's Chocolate-Flavored Malted Milk. The representative in attendance will be pleased to explain the advantages of these various products, and will welcome inquiries and discussions. Samples and literature will be supplied, and the Dumore Electric Mixer will be demonstrated.

The Kelley-Koett Manufacturing Company has recently opened a direct branch office in the California Medical in Los Angeles under the supervision of Mr. G. E. Magee, a factory-trained man.

There will be a display of the new Portable X-Ray

Unit, Mobile Diathermy Machine, Buckey Diaphragm, and many other pieces of equipment of interest to the profession, both at the display booth and also on our display floor.

Keniston-Root Corporation—Of special interest to the medical profession at this time is correct diagnosis. Scientific apparatus for assisting the physician may be seen in the Taylor Instrument Company's Recording Syphygmanometer and the Toledo Technical Company's McKesson Recording Matabolar.

These and many other valuable instruments of recent development will be displayed in the exhibit of the Keniston-Root Corporation. Their booth will be found in charge of our old friend Sidney Root.

Pacific Surgical Manufacturing Company—During Convention days one renews old friendships and enjoys a moment's relaxation from the rush of a busy world.

It is the wish of the Pacific Surgical Manufacturing Company and its representatives to have you visit their exhibit—make it your rendezvous. May your visit be a happy reunion.

Riggs Optical Company—Among others who are preparing to do everything possible for the success of the fifty-sixth annual session, the Riggs Optical Company are making extensive plans for the display of surgical instruments, specializing on those for the eye, ear, nose, and throat. In addition to the surgical and ophthalmological instruments, they will also show the newer models of equipment.

They also extend a welcome to the profession to make use of their office located in the Broadway Arcade Building, 542 South Broadway. Mr. Diederich, the local manager, desires personally to meet as many of his out-of-town friends as possible, and those associated with him will likewise be very glad to render any service that may be desired. They will be happy to assist in any way to make your visit to the city a pleasant and enjoyable one.

The R. L. Scherer Company will have on display the latest contributions to the armamentarium of the physician and surgeon developed by the Wappler Electric Company, as well as other manufacturers, including the new Wappler Monex X-Ray machine, a new departure in the design and construction of x-ray equipment. This is the machine in which the Wappler Company have succeeded in eliminating all moving parts, thereby providing an x-ray machine that is silent and requires a minimum amount of space and attention. Of interest also will be the display of Wappler High Frequency machines, with three models—the Portable Telantherm, Electrotherm, and the Excell—to select from. There will also be on display a complete line of surgical instruments.

The exhibit of the **Victor X-Ray Corporation** will feature their line of physical therapy apparatus including the new Portable Vario-Frequency Diathermy apparatus, with a capacity of 4000 ma. over a selective frequency range of from 500 to 2000 kilocycles; the Wantz Multiple Wave Generator, for the production of galvanic, surging galvanic and sinusoidal currents; the Sigmund Galvanic Controller; Air and Water-Cooled Ultraviolet Quartz Lamps; Phototherapy Lamps and Vibratory Massage Apparatus.

The trained representatives in charge of the Victor booths will cheerfully assist you in solving your technical problems involving either physical therapy or x-ray apparatus.

Doctors' Business Bureau—Strictly in keeping with the splendid service rendered to Association members exclusively by the Doctors' Business Bureau, they will have at the Convention an expert medical stenographer for the free use of delegates and members. It will be to the advantage of any doctor to call at their desk for firsthand information regarding their departmental business service. Their Collection Department now offers a new but proven system of direct collections. It is effective, economical, labor-saving, and nonoffensive. Other departments are Legal, Accounting, Income Tax, and Patients' Financial Ratings. Improve the business end of your practice. See them.

CALIFORNIA MEDICAL ASSOCIATION

W. T. McARTHUR.....	President
PERCY T. PHILLIPS.....	President-Elect
ROBERT V. DAY.....	Vice-President
EMMA W. POPE.....	Secretary

ALAMEDA COUNTY

The regular meeting of the Alameda County Medical Association was held at the Ethel Moore Memorial Building, Monday, February 21, 1927. The program consisted of a symposium on the subject of allergy, which was prepared by Albert H. Rowe. Doctor Rowe read a paper on "Allergy in the Etiology of Disease." He emphasized the fact that allergy is being recognized as the cause of an increasing number of symptoms and that the diagnosis of protein sensitization must be made on the basis of careful history and from thorough skin testing. He prefers the cutaneous test over the intradermal in the diagnosis of this condition. Cases were cited in which allergy was the cause of abdominal pain, and he laid stress on the fact that any individual who has allergy either in the family, or in his own personal history, and who is suffering from indigestion or abdominal pain which is difficult to explain on the basis of a careful diagnostic study, should be investigated from the point of view of allergy. Eczema and dermatitis he believed in most instances to be due to protein sensitization most frequently of food origin. Migraine and epilepsy were pointed out as frequently of allergic origin, this point being illustrated by case reports. In seasonal hay fever individuals should be tested with a large variety of pollens, and with other types of proteins, in order to reveal potential sensitizations. It becomes progressively easier to control the seasonal hay fever as treatment is continued year by year, and many individuals eventually lose their skin reactions with such treatment. Perennial hay fever is most frequently due to animal emanation, proteins, orris root, and house dust sensitizations, but may be due to pollens. Bronchial asthma is more frequently due to animal emanation, house dust, food, and pollen protein sensitizations. Sensitization in the asthmatic is usually multiple, and the chronic case frequently has sensitization to pollens, animal emanation, and food proteins. Treatment must take into consideration all the sensitizations present, according to the author.

J. H. Templeton read a paper entitled "Sensitization Phenomena in Dermatology." In it he discussed sensitization to protein and nonprotein substances as etiologic factors in the production of the common dermatoses. He held that a carefully taken history was of great importance in determining the source of these offending agents. He recognized the value of percutaneous tests. They should not be regarded as a quick, easy, infallible method of arriving at a diagnosis, but rather as valuable aids in certain obscure cases. The study and practice of allergy is more difficult and of somewhat less value in dermatology than in other fields.

The last paper of the group was read by Clifford Sweet, who discussed "Allergic Manifestation in Children."

The scientific program was followed by refreshments and a social half hour.

GERTRUDE MOORE, M. D.

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CONTRA COSTA COUNTY

The February meeting of the Contra Costa County Medical Society was held in Richmond, California, at the offices of Drs. Abbott and Hely, Saturday, February 26, 1927.

S. A. Jelte of Oakland gave a very instructive paper on the uses of "X-Ray and Radium Therapy." An interesting and beneficial discussion followed.

Leo P. Bell and D. S. Pulford of the Woodland Clinic were welcome guests of the society.

B. F. Sandow of Byron Springs, Ruth Burn of Concord,

and L. W. Wuesthoff of Richmond were voted into the society.

J. M. McCullough, president, appointed J. Beard of Martinez (chairman), D. C. Wise of Pittsburg, and G. W. Bumgarner of Richmond to act on the Legislative Committee for the Medical Society.

Refreshments were enjoyed following the adjournment of the meeting.

Present—J. W. Bumgarner, G. W. Bumgarner, J. Beard, H. Vestal, J. M. McCullough, Rosa Powell, H. L. Carpenter, C. E. Camp, W. A. Rowell, L. P. Bell, D. S. Pulford, S. N. Weil, W. E. Cunningham, L. St. John Hely, Miss Moore, R. N.; Miss Shroub, R. N.

S. N. WEIL, Secretary.

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ORANGE COUNTY

HOWARD SAMUEL GORDON
1853-1927

Howard Samuel Gordon was born in Ray County, Missouri, August 11, 1853. He received his degree of Doctor of Medicine from the Kansas City College of Physicians and Surgeons of Missouri, 1878. After practicing in Missouri, Colorado, and Arizona he came to Westminster, California, in 1898. A short time later he removed to Santa Ana where he remained until 1919. He served for four years as secretary of the Orange County Medical Association and was president of the society in 1901. He transferred to the Riverside County Medical Society in 1920. Ill health compelled him to give up his practice some years before his death.

Whereas, A former member of the Orange County Medical Association Howard Samuel Gordon, died in Santa Ana, California, on Monday, January 24, 1927; and

Whereas, Doctor Gordon was respected and well loved by all his associates, therefore be it

Resolved, That we sincerely regret the death of our beloved associate, Howard S. Gordon; and

Resolved, That the sympathy of this association be hereby extended to the bereaved wife and family of our late confrère and that they be presented with a copy of this memorial; and

Resolved, That these resolutions and this memorial be inscribed in the records of the association.

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SACRAMENTO COUNTY

A clinical evening at the Sacramento Hospital supplied the impetus for one of the best attended meetings of the year. It is interesting to note that this type of meeting, instituted three years ago, is rapidly becoming a byword among the members, and all look forward to it from year to year. A. K. Dunlap, superintendent of the Sacramento Hospital and vice-president of our local society, presided.

The minutes of the previous meeting were read and approved.

C. E. Schoff presented a case of arsenical poisoning, manifested by bleeding from the skin and mucosa. This hemorrhagic condition followed intensive antisyphilitic treatment with sulph-arsphenamine given intravenously. Between December, 1926, and February, 1927, the patient had had thirteen 0.6 grams sulph-arsphenamine injections. Three days later subcutaneous hemorrhages started in the region of the neck, armpits, mouth, and abdomen. Later there was bleeding in the eyes, ears, bladder, and lower bowel. Transfusion of 600 cc. of blood was given on February 9. Clotting time was four and one-half minutes, and the Wassermann was four plus. Seven injections of 1 gram sodium thiosulphate were given. The patient now shows marked improvement.

E. M. Wilder presented histories and pyelograms of four selected cases demonstrating the frequencies of renal syndromes simulating intra-abdominal surgical conditions. The discussion by Dunlap, Bell, and Topping emphasized differential diagnosis.

Hart presented a most interesting patient whose trouble began very insidiously. An x-ray picture of the patient's chest showed a thoroughly consolidated right upper lobe. A purulent, brown-stained, odorous sputum, and the obtaining of bloody fluid by puncture have persisted. Every effort to find T. B. bacilli has failed. The discussion

entered into by Bell, Scatena, O'Brien, Gundrum, Snyder, Howard, Drysdale, Thom, Pitts, and Yates considered the possibilities of tuberculosis, malignancy, unresolved pneumonia, and diagnostic aids by use of lipiodol injections.

F. N. Scatena showed a patient and his radiograms; having a pericarditis with effusion. The reason for this demonstration was to show the occasional difficulty of a conclusive x-ray finding in this clinical condition.

F. A. McDonald spoke on the treatment of cutaneous burns by means of a 2½ per cent aqueous solution of tannic acid. He compared this treatment with others and demonstrated the end results in a patient.

Applications—Applications for membership were read for the first time from Raymond M. Wallerius and Eva M. Shively. The second reading of the application of Louise M. Igo-Fliteroft was followed by a vote which showed her election to the local society.

Report of the Board of Directors announced the election of A. K. Dunlap as vice-president of the society, and the appointment of J. R. Snyder as chairman of the Annual Banquet Committee, and the appointment of the following Public Relations Committee: Bramhall (chairman), Cress, and Soutar.

With no further business to discuss, the meeting adjourned to a most delightful table provided by the hospital.

BERT S. THOMAS, *Secretary*.



SAN BERNARDINO COUNTY

Minutes of the meeting of the San Bernardino County Medical Society held March 1 at the County Hospital, San Bernardino, at 8 o'clock p. m.

Meeting was called to order by the president at 8 p. m. The minutes of the previous meeting were read and approved. No objection being received the following men were admitted to membership: Wilbur E. Kellum, F. S. Modern, Alden C. Thompson.

The program of the meeting was then entered upon: "Etiology of Appendicitis," by C. Van Zwahlenburg. Discussion opened by C. L. Curtiss.

"Oral Administration of Tetraiodophenolphthalein Sodium as an Aid to Diagnosis in Diseases of the Gall Bladder," by Paul F. Thureson. Discussion opened by Frank Folkins.

There were about twenty-seven present, seven of whom were guests.

Before adjournment C. L. Curtiss requested that fuller reports of the activities of the Council be made at each meeting.

Notice was given of the willingness of Doctor Scholts to hold a dermatological clinic at the meeting of the Southern California Medical Association in Redlands.

Meeting adjourned at 10:30 p. m.

E. J. ETYNGE, *Secretary*.



SAN JOAQUIN COUNTY

The stated meeting of the San Joaquin County Medical Society was held Thursday evening at 8 p. m., March 3, 1927, at the local Health Center, 129 South American Street. Thirty-eight were in attendance. Those present were J. W. Barnes, E. L. Blackmun, C. O. Bishop, J. F. Blinn, Winifred Biethan, C. A. Broadbuss, F. J. Conzelmann, J. T. Davison, J. F. Doughty, C. F. English, F. T. Foard, Percy Gallegos, L. M. Haight, S. Hanson, C. D. Holliger, H. E. Kaplan, Grace McCoskey, A. H. McLeish, W. T. McNeil, F. S. Marnell, F. J. O'Donnell, H. C. Peterson, D. R. Powell, D. F. Ray, G. H. Rohrbacher, F. B. Sheldon, J. J. Sippy, J. A. Smither, Margaret H. Smyth, Hudson Smythe, L. E. Tretheway, J. J. Tully, A. L. Van Meter, N. E. Williamson; and Doctors Bell, Larson, and Pulford of Yolo County Medical Society, visitors; and Eugene S. Kilgore, guest and speaker of the evening.

The meeting was called to order by Doctor Barnes, president, at 8:30 p. m. The chairman introduced and extended a welcome to the visitors from Yolo County.

The minutes of the previous meeting were read and approved.

The committee on admission reported favorably on the application for membership of C. O. Bishop of Linden.

In accordance with the constitution, the Chair declared C. O. Bishop duly elected an active member of the society.

The Chair announced that he had received a communication from the Community Chest officials of Stockton requesting to be permitted to send a speaker for the evening, but as all arrangements for the program of the evening had already been made the Chair wrote the officials of the Community Chest to that effect and stated that he would present the matter to the society and urge its members to give every aid and assistance possible.

The Chair announced the appointment of the Legal Committee to work in cooperation with the Legal Committee of the State Medical Association in the matter pertaining to bills coming before the legislature some of the bills aim at modifying the practice of public health to the community, and modifying the medical status of the Compensation Act. The members constituting this committee are J. J. Sippy, R. T. McGurk, Dewey R. Powell, Allen R. Powers of Tracy, California; and G. P. Cooper, Angel Camp, California.

Doctor Sippy stated that the Tuberculosis Association of California had made plans to meet in some city of northern California on Friday and Saturday, May 6 and 7, 1927.

Action—Moved by Doctor Sippy, seconded by Doctor Broadbuss, that an invitation be extended to the Tuberculosis Association to hold its annual meeting in Stockton on Friday and Saturday, May 6 and 7, 1927. Carried.

Moved by Doctor Sippy, seconded by Doctor Doughty, that the regular meeting in May, 1927, be held Friday, May 6, 1927, instead of May 5, and that the society meet with the Tuberculosis Association. Carried.

The secretary was instructed to send the letter of invitation, and the Program Committee to arrange for a suitable meeting place in the event the Tuberculosis Association comes for its meeting to the city of Stockton.

The chairman presented Eugene S. Kilgore of the University of California, who spoke in a very practical and clear-cut way on the subject of "Pitfalls in Heart Diagnosis."

The speaker stated that there are two groups of cardiac disturbances: in one group the symptoms and signs refer directly to the heart, and these symptoms and signs are often mistakenly interpreted as cardiac disease when no cardiac condition is present; and in the second group the symptoms and signs due to heart disease are interpreted as conclusive indication of disease of other organs. The first group of symptoms and signs occur commonly in young people; the other group in persons past middle life and beyond. In the first group all the symptoms may suggest actual heart disease, and the patient is labeled heart disease, when on careful examination the condition is found to be noncardiac; with all the symptoms and signs of heart disease, but no definite disease can be found. The symptom complex has been designated by Lewis as "effort syndrome." The symptoms may be breathlessness, fatigue, exhaustion, palpitation, fainting or giddiness. Breathlessness in heart affections means heart damage, but it is a common symptom in noncardiac cases following infectious diseases, fatigue and exhaustion. Faintness and giddiness are often symptoms of actual heart disease, but much more common in neurotic individuals. The patient comes with the idea of heart disease. It is important to determine the cause of the faint. Was it psychological? seeing an accident, being vaccinated, having blood taken for Wassermann, or having blood pressure taken? A sudden change of posture from the recumbent position to the sitting or standing position may cause dizziness.

In palpitation the heart beats uncomfortably; frequently present in noncardiac cases, increased frequency is common in effort syndrome. People with an irritable nervous system often become distressed and uncomfortable from palpitation.

Premature contractions are generally accurately described by the patient by phrases like "flipping a trout," "dripping in the chest," "back fire of an automobile," "feeling of fullness in the neck." One can put heart block to one side with a description of that kind. A skipped beat does not mean heart block. A serious cardiac condition may be missed by confusing heart block as premature contractions.

Paroxysms of tachycardia, or "racing periods" of the

heart, means a sudden change from an ordinary rhythm to a rapid beat. The patient can as a rule describe the change very accurately. Patients with paroxysms of tachycardia have a good life expectancy. Systolic murmurs are often taken to mean heart disease. In examining large groups of young people as university students 30 per cent have systolic murmurs either at apex or pulmonic area, but have no cardiac affliction. Base your judgment of heart disease on systolic murmurs plus something else.

Presystolic or diastolic murmurs when genuine always mean some heart defect—valvular lesions, etc.

Symptoms and signs of heart disease that often lead to mistaken diagnosis or diagnosis of conditions in other organs, occurring in people past middle life. The symptoms direct attention away from the heart. There are the congestive symptoms. Gas in stomach at or past middle life is indicative of circulatory disease. In heart disease or circulatory disease, gas and fullness immediately after eating is worse. Beginning sclerosis, angina, syphilitic heart, pain and distress may lead to the diagnosis of stomach trouble.

When death occurs suddenly after a full meal it is commonly stated to be caused by acute indigestion; it is in 98 per cent the result of disease of the coronary arteries. In cardiac disease gas and belching are common.

Coronary thrombosis may simulate an acute abdomen, pain in the epigastrium or in the chest. The pain comes on without effort. Patient may get it resting in bed or when active. The physician may be thrown off his track when on careful examination he finds little or only slight physical signs. The alternating pulse is often missed; it is the big—little—beat—always means damage to cardiac muscle. It can be plainly felt with the fingers. It can also be ascertained by having blood pressure cuff at systolic height and note whether a pulse wave comes through.

Pain may direct attention to the heart when the heart is not sick. Pain in angina pectoris is threatening. Age, sex, and occupation are important factors in genuine angina pectoris, which occurs at or past middle life. Pseudoangina is a condition of the young and nervous type of individual; it is not common in a laborer.

The kind of pain is also important; lancinating, stabbing, piercing, or that the chest is in a vise, or a load on chest is common in pseudoangina. In pseudoangina the pain is oftenest over the heart; in genuine angina the pain is often under the sternum.

The pain of genuine and pseudoangina may radiate. Radiation of pain is more common in genuine angina. It may radiate to the shoulder, arm, wrist, and jaw. General anginal attacks before the age of 40 are commonly due to old syphilis.

Throughout his lecture Doctor Kilgore cited histories of patients personally observed by him in his practice for the purpose of illustrating his points and to clear the way for a proper understanding of the diagnosis of heart conditions.

Doctors Pulford, Bell, Davison, and Blackmun entered into the discussion, and many questions were asked which Doctor Kilgore answered in a practical and instructive manner.

FRED J. CONZELMANN, *Secretary.*

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SANTA BARBARA COUNTY

The regular monthly meeting of the Santa Barbara County Medical Society was held in the Cottage Hospital on Monday evening, February 14, with President H. E. Henderson, M. D., in the chair.

The minutes of the annual meeting were read and approved.

The scientific program was opened by Rexwald Brown, who first gave a case report of a tumor on the superior wall of the uterus, then followed with six case reports of perforated peritonitis, in which he emphasized the efficacy of the Ochsner, Murphy, Fowler after-treatment.

H. J. Ullmann then gave a paper on "Roentgen (Rentgen) Diagnosis of Nasal Sinus Disease," followed by "Ethmoidal and Sphenoidal Sinuses as Sources of Focal Infection"—W. D. Sansum.

These papers were thoroughly discussed by Doctors

Profant, Means, Wells, Vandevere and Lewis, and briefly discussed by other members of the society.

A report was read by Rexwald Brown, chairman of the committee appointed by the president to ascertain ways and means to consolidate and unify the various health activities of the city of Santa Barbara. This report was most constructive and was unanimously adopted by the society. The report called for the appointment of three members of the society to continue the investigation, and the president thereupon appointed Doctors Brown, Means, and Freidell.

A communication from Mr. George E. Coleman, president of the American Association for Medical Progress in re the Hulsinger Anti-Evolution Bill was read. It was moved by Doctor Lewis, and seconded by Doctor Mellinger, that the secretary be instructed to send a copy of this protest to Mr. William Byrne, chairman of the Committee on Education of the Assembly, Sacramento, and also to Representative Finley, under the name of the Santa Barbara County Medical Society.

George Luton reported an incident of the Chamber of Commerce sending out a specific fee bill. This was followed by Rexwald Brown, who read the complete correspondence of the Chamber of Commerce in re this action, and upon motion of Doctor Robinson, duly seconded, it was moved that the Chamber of Commerce be requested to refer, in the future, all such communications to the president of the medical society.

A communication from the Southern California Medical Association inviting our membership to attend the seventy-sixth semiannual convention of the Association at Redlands, March 18 and 19, was read and ordered filed.

A communication from the Clinical and Statistical Section of the Los Angeles County Medical Association inviting our membership to attend these clinics at any time when in the city of Los Angeles, was read, and upon motion duly seconded and carried, the secretary was instructed to extend to this section a vote of thanks of the society and also request if it would be possible for them to send a daily program to each of the hospitals, to be posted in a conspicuous place.

The following applicants filed their credentials and dues for membership in the Santa Barbara County Medical Society: J. C. Bainbridge, R. W. Johnson, Richard Evans, and W. E. Vandevere. The applications were read and given to the Board of Censors.

The president appointed a program committee consisting of Doctors Sansum, Means, and Eaton.

There being no further business the meeting adjourned.

The regular monthly meeting of the Santa Barbara County Medical Society was held in the Cottage Hospital at 8 o'clock on Monday evening, March 14, with President H. E. Henderson in the chair.

There were present twenty-three members of the society and two visitors.

The scientific program was opened by the presentation of a case of "Plastic Repair of an Extensive Face Burn" by W. J. Wells.

This was followed by "Intestinal Obstruction" by C. S. Stevens, and a report of several cases of "Fracture with Open Reduction" by H. L. Schurmeier.

At the conclusion of the scientific program the meeting went into executive session.

It was moved by Doctor Brown, seconded by Doctor Ullmann and carried unanimously, that the society contribute the sum of \$20 to the Walter Reed Memorial Fund.

It was moved by Doctor Sansum, seconded by Doctor Ullmann and carried, that the Santa Barbara County Medical Society recommend to the Cottage Hospital that a minimum of two interns be on duty at the hospital at all times.

A bill of \$2.60 for payment of song books lost at our annual meeting was ordered paid to G. W. Curtis.

The president appointed Doctor Lamb as an additional member of the program club.

The president appointed a legislative committee consisting of Doctors Stevens, Bagby, and Eaton.

It was moved, seconded and unanimously carried, that

the Medical Society endorse the preschool examinations sponsored by the State Board of Health and that they gratuitously furnish medical examiners when requested.

There being no further business the meeting adjourned.

W. H. EATON, M. D., *Secretary*.

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STANISLAUS COUNTY

The regular monthly meeting of the Stanislaus County Medical Society was held on March 11. It was the best meeting in the history of the society.

The Modesto Women's Improvement Club entertained the society at the new Women's Improvement Club building. A delicious turkey dinner was served at 6 p. m. There were thirty-eight physicians and eighteen ladies as guests.

During the dinner a musical program was rendered by Mr. Charles Gartin, Mrs. Everett Bates, Madam Raddue and the Raddue brothers. Following dinner the ladies had a pleasant evening with five tables of Bridge. The medical program was, as follows:

X-Ray Finding in Gall Bladder Disease, E. V. Falk, Discussion opened by E. R. McPheeters.

Retinitis Pigmentosa, R. M. Porter. Discussion by L. D. Mottram, J. K. Morris, and E. F. Reamer.

Report of Cases of Face Presentation, J. A. Cooper. Discussion opened by F. R. McKibbin.

Case Reports of Spina Bifida, J. E. Clark. Discussion general.

Much time and thought had been given the papers and full discussion followed each paper.

Under the capable direction of the president, E. V. Falk, the society is enjoying a very successful year. The attendance at each meeting has been the largest in the society's history.

J. W. MORGAN, *Secretary*.

CHANGES IN MEMBERSHIP

Deaths—Burton, James. Died at Pasadena, March 7, 1927, age 59. Graduate of the Albany Medical College, New York, 1894. Licensed in California in 1914. Doctor Burton was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

Howard, Henry Williams. Died at Los Angeles, February 23, 1927, age 61. Graduate of Rush Medical College, Illinois, 1890. Licensed in California in 1896. Doctor Howard was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

Thomas, Charles Preston. Died at Santa Monica, February 21, 1927, age 62. Graduate of the University of Oregon Medical School, 1888. Licensed in California in 1893. Doctor Thomas was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

New Members—Alameda County—Helen A. Moore, Berkeley.

Butte County—Vernon Rood, Stirling City.

Humboldt County—Frederick C. Gregg, Scotia.

Imperial County—Benjamin R. Davidson, Brawley; Junsai Watanabe, El Centro.

Kern County—Lloyd H. Fox, William C. Paul, Bakersfield.

Los Angeles County—Herbert A. Huntington, Walter C. Johnson, Edward J. Kilfoy, Solomon I. Movitt, Werner Rammelt, Philip A. Reynolds, Alphonse J. Schubert, John M. Wheelis, Los Angeles; Houston H. Parsons, Santa Monica; Arthur P. Thompson, Bell; Harry T. Upshaw, Pasadena.

Merced County—Clarence C. Fitzgibbon, Merced Falls; Chester A. Moyle, Merced.

Napa County—Carl A. Johnson, Inola.

Orange County—Samuel W. Leiske, Brea.

Placer County—Monica Stoy Briner, Lincoln; Max Dunievitz, Colfax.

Sacramento County—Louise M. Igo-Fliteroft, Sacramento.

San Bernardino County—Cyril B. Courville, Myron S.

King, Alden C. Thompson, Loma Linda; Geoffrey J. Fleming, Ontario; John A. Graham, Barstow; Wilbur E. Kellum, Redlands; Samuel W. Kime, Mentone; F. S. Modern, Arrowhead Springs; Lloyd E. Smith, San Bernardino.

San Diego County—Roelf Berkema, Alpine; Frank St. Sure, San Diego.

San Francisco County—Arthur C. Armstrong, Einar V. Blak, Everett Carlson, Emelie A. De Eds, Roy L. Fielder, Frederick L. Reichert, Christian E. Voigt, Benjamin L. Freedlander, San Francisco.

San Joaquin County—Clifford L. Bishop, Linden; C. E. Stagner, Tracy.

San Mateo County—Benjamin Page, San Mateo.

Santa Clara County—Edward Amaral, Stanley Dougan, Louis Lackner, San Jose; Frank R. Anderson, Campbell; Herbert L. Niebel, Palo Alto.

Santa Cruz County—Oscar C. Marshall, Watsonville.

Sonoma County—Robert L. Matteo, Santa Rosa.

Stanislaus County—Hans Hartman, Harry B. Stewart, Ripon.

Tulare County—Gilbert B. Furness, Frank Kohn, Visalia; J. Seiberth, Pixley; Benjamin H. Pratt, Lemoore.

Tuolumne County—John Paul Sweeney, Tuolumne.

Transferred Members—Harold J. Beaver, from Santa Cruz County to Santa Clara County.

Fred J. Crease, from Kern County to Los Angeles County.

J. Carl Cummings, from Santa Barbara County to Los Angeles County.

E. J. Finnerty, from Alameda County to Sonoma County.

N. B. Gould, from San Joaquin County to Stanislaus County.

Fred Harrison, from Santa Cruz County to Humboldt County.

John L. Montgomery, from Los Angeles County to Kings County, Washington.

F. H. Oldberg, from Mendocino County to Contra Costa County.

Merl L. Pindell, from Orange County to Los Angeles County.

Ralph M. Smith, from Imperial County to Riverside County.

Chester J. Teass, from San Francisco County to San Luis Obispo County.

Oliver E. Thompson, from San Francisco County to Riverside County.

Charles Weddle, from Fresno County to Tulare County.

Resigned Members—Frank J. Gobar, Fullerton, California; B. G. Pinkerton, Alleyne von Schrader, W. L. Winnard, Los Angeles.

IN MEMORIAM

William Everett Musgrave

(Resolution adopted by the Council of the California Medical Association at its meeting of March 21, 1927.)

Resolved, By the Council of the California Medical Association, that in the death of William Everett Musgrave, our Association has suffered the loss of one of its most loyal members; has been deprived of a man who, of his wide scientific and medical organization knowledge, gave of himself without stint; and has had taken from its active membership a colleague, whose vision and kindly thought for the welfare of our beloved profession means now an almost irreparable loss; and be it further

Resolved, That this Council expresses to Mrs. William Everett Musgrave its deep sympathy with her in her great sorrow, and assures her that the memory of the many good works of William Everett Musgrave will remain an inspiration to the California Medical Association and to its members; and be it further

Resolved, That a copy of these resolutions be spread upon the minutes of this Council; that they be printed in CALIFORNIA AND WESTERN MEDICINE; and that a copy be engrossed, and sent to Mrs. William Everett Musgrave.

LIST OF SCIENTIFIC PUBLICATIONS OF W. E. MUSGRAVE

The life of Dr. William E. Musgrave and a tribute to his memory are published elsewhere in this number of CALIFORNIA AND WESTERN MEDICINE. Not until a list of Doctor Musgrave's writings was compiled had members of the Council any realization of the extent and scope of his scientific contributions to medicine. The following bibliography of the major studies and writings of Doctor Musgrave are a tribute to his ability as a physician and student, to his industry and to his broad grasp of matters medical.

1900. The Occurrence of Malta Fever in Manila, by R. P. Strong and William E. Musgrave. Philadelphia Med. Jour., 1900, vi, 996-1000, 1 chart. Preliminary Note Regarding the Etiology of the Dysenteries of Manila, by R. P. Strong and William E. Musgrave. Annual Report Surgeon-General, U. S. Army, Washington, 1900, 251-273.
1901. The Etiology of the Dysenteries of the Philippine Islands, by R. P. Strong and William E. Musgrave. U. S. Army Circulars on Tropical Diseases, Manila, 1901, ii, 7-54. Preliminary Note of a Case of Infection with Balantidium Coli (Stein), by R. P. Strong and William E. Musgrave. Bull. Johns Hopkins Hosp., Balt., 1901, xii, 31-32.
1902. Heatstroke, Followed by Nonfatal Lightning Stroke; Report of a Case, with Sequels, by George R. Torney and William E. Musgrave. Am. Med., Philadelphia, 1902, iv, 625-626. Sprue or Psilosis in Manila: A Disease or State. Am. Med., Philadelphia, 1902, iii, 389-394; 428-433. Abstract in Philadelphia Med. Jour., 1902, ix, 521-522.
1903. A Preliminary Report on Trypanosomiasis of Horses in the Philippine Islands, by William E. Musgrave and Norman E. Williamson. Bull. Bur. Govt. Laboratories, Manila, 1903, iii, 26 pp., 2 pls., 3 charts. Una Relacion Preliminar Sobre la Tripanosomiasis de las Caballos en las Islas Filipinas. Bull. Bur. Govt. Laboratories, Manila, iii (Spanish edition), 26 pp., 2 pls., 3 charts. Trypanosoma and Trypanosomiasis, with Special Reference to Surra in the Philippine Islands, by William E. Musgrave and M. T. Clegg, with a bibliography by Mary Polk. Bull. Bur. Govt. Laboratories, Manila, 1903, v, 248 pp., 155 illus., 2 maps.
1904. Amebas: Their Cultivation and Etiologic Significance, by William E. Musgrave and M. T. Clegg, with References to Literature by Mary Polk. Ibid., 1904, xviii, pt. 1, 1-86, 35 illus.
1905. Amebas: Their Cultivation and Etiologic Significance, by William E. Musgrave and M. T. Clegg. Jour. Infect. Dis., Chicago, 1905, ii, 334-350, 1 pl. Amebic Infection of the Urinary Bladder Without Rectovesical Fistula, by John R. McDill and William E. Musgrave. Med. News, New York, 1905, lxxxvii, 1163-64. The Pathology of Intestinal Amebiasis, by Paul G. Woolley and William E. Musgrave. Bull. Bur. Govt. Laboratories, Manila, 1905, xxxii, pt. 3, 31-48, 23 illus. Also in Jour. Am. Med. Assoc., Chicago, 1905, xlv, 1371-78, 27 illus. (3 colored). Symptoms, Diagnosis and Prognosis of Uncomplicated Intestinal Amebiasis in the Tropics. Jour. Am. Med. Assoc., Chicago, 1905, xlv, 830-37. Treatment of Intestinal Amebiasis in the Tropics. Ibid., 1905, xlv, 1098-1107.
1906. Amebiasis: Its Association with Other Diseases, Its Complications, and Its After Effects. Philippine Jour. Sc., Manila, 1906, i, 547-73. The Cultivation and Pathogenesis of Amebae, by William E. Musgrave and M. T. Clegg. Ibid., 1906, i, 909-50, 10 illus. Tropical Splenomegaly, by William F. Musgrave, W. B. Wherry, and Paul G. Woolley. Bull. Johns Hopkins Hosp., Balt., 1906, xvii, 28-32. Abstract in Med. Rec., New York, 1906, lxi, 628.
1907. The Etiology of Mycetoma. Report of a Case of the Ochroid Variety Occurring in the Philippine Islands and Caused by a New Species of Streptothrix (*Streptothrix Freeri*), by William E. Musgrave and M. T. Clegg, with a bibliography by Mary Polk. Philippine Jour. Sc., Manila, Sec. B., 1907, ii, 477-511, 10 illus., 1 table. Gangosa in the Philippine Islands, by William E. Musgrave and H. T. Marshall. Ibid. Sec. B., 1907, ii, 387-401, 1 illus. Infant Feeding and Its Influence Upon Infant Mortality in the Philippine Islands, by William E. Musgrave and George F. Richmond. Ibid., Sec. B., 1907, ii, 361-85, 1 chart. Paragonimiasis in the Philippine Islands. Ibid., Sec. B., 1907, ii, 15-65, 48 illus.
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*"Under the wide and starry sky
Dig the grave and let me lie.
Glad did I live, and gladly die,
And I laid me down with a will.*

*This be the verse you grave for me:
Here he lies where he longed to be;
Home is the sailor, home from the sea,
And the hunter home from the hill."*

The words and sentiments of the above epitaph, written by Robert Louis Stevenson, came to the minds and hearts of many friends of Doctor Musgrave who were present when, on March 11, our late editor was laid to rest in a spot which he himself had chosen.

The honorary pallbearers were: Drs. William T. McArthur, Percy T. Phillips, James W. Ward, Morton R. Gibbons, Wallace I. Terry, Howard Morrow, Herbert C. Moffitt, Percy T. Magan, Ernest H. Falconer, Robert V. Day, O. D. Hamlin, Harlan Shoemaker, Howard C. Naffziger, William Duffield, Alfred C. Reed, George H. Kress; Messrs. Charles C. Cole, Samuel Buckbee, Frederick Koster, and P. C. Harrison.

Los Angeles Steamship Company—There has been developed during recent years a very marked tendency for bodies of delegates traveling to one of the Pacific Coast cities to move by water, where possible, on the same steamship.

According to the expressed opinion of many connected with convention movements, water travel on the Pacific Coast offers peculiar advantages for movements of this type. This is particularly the case between San Francisco and Los Angeles and San Diego. Not only do our California coastwise liners provide unusually swift and particularly luxurious transportation, but the possibilities of extending group friendships and of enjoying formal and informal meetings and discussions of matters of interest to the delegates is particularly favorable while traveling on a big passenger steamship.

In addition there is the immediate development of a holiday spirit of enjoyment among the delegates as soon as they gather on a deck of a liner and watch the shores of their port of departure fade away, leaving to them the freedom of a large ship with the luxuriousness, spaciousness and cleanliness which particularly mark travel on such coastwise liners as the Yale and Harvard.

These sisterships will provide a special program of entertainment for delegates sailing from San Francisco for the California Medical Association Convention in Los Angeles, April 25 to 28, and bookings are being made over a wide range of the northern territory for this trip.

Southern Pacific Train Service to Los Angeles—Los Angeles and San Francisco were still more closely bound together by railroad service March 20, when the Southern Pacific placed in service a fast daylight train between the two cities operating via the San Joaquin Valley. The company now has two fast daylight trains operating between the two cities, one via the Valley and one via the Coast route; and altogether has ten trains a day each way.

The new train, the San Joaquin Flyer, carries parlor observation car and dining car besides coaches. The Daylight Limited, the daylight train on the Coast route, also carries observation and dining cars. It operates the entire distance without a stop to take on passengers, being unique in American railroad transportation, in this respect.

The Southern Pacific has started a number of innovations on its San Francisco-Los Angeles trains; for example, the company is providing an elaborate table d'hôte meal for \$1.50 on the Owl dining cars. Another innovation is the practice of announcing meals on mellow-toned dinner gongs.

UTAH STATE MEDICAL ASSOCIATION

W. R. CALDERWOOD, Salt Lake.....President
 E. H. SMITH, Ogden.....President-Elect
 FRANK B. STEELE, Salt Lake.....Secretary
 J. U. GIESY, 701 Medical Arts Building, Salt Lake.....Associate Editor for Utah

BAYING THE MOON

Eve ate the apple, and we all must die. "An apple a day keeps the doctor away." Here seems a paradox rather difficult to harmonize. And on top of it Bre'r McFadden, helmsman of the *Physical Culture Magazine*, appears to believe that a man may eat his way into health, as well as dig his grave with his teeth.

The writer is somewhat interested in McFadden's latest outburst against the profession itself. This gentleman for some years has, as it were, been "baying the moon."

Quoting not literally, from the February number, and from the standpoint of apparent meaning conveyed, he does not hesitate to allege that the public is at the mercy of a monopolistic organization of some 70,000 members, banded together to batten off the physical woes of patients and to protect one another from any penalization for the "criminal" acts in the operating room or the sick room.

This would of course be bad enough if it were true. Yet we could scarcely escape the feeling in reading the article that the fact which appeared to be troubling the writer, whoever he may have been, was that within recent years the rapidly growing sport of suing the doctor for "malpractice" has seemingly become less lucrative.

To err is human, and we are all human—some of us less so than others, of course. Yet having been in the profession for years, the writer would express the opinion that the greatest penalty a doctor may suffer or have inflicted upon him lies in the conscious knowledge that he *has* made a mistake. Do those who so often criticize the medical profession have any real conception of how the average doctor works, of how much thought, study, consideration and mental travail he expends upon the patients he treats, of how the doctor "takes his case to bed with him." Certainly we feel that the sincere endeavor to do his best which he exhibits is far greater than that given by the framer of an attack upon a profession which has spent its time in combating and alleviating human suffering for so many, many years has given to the truth of the things it has pleased him to allege.

Wherefore we deprecate such articles as this. Like the "baying of the hound at the moon," it promotes unrest despite the fact that it is a futile voice-ment, the major effect of which is to disturb the quiet of the night without any effect on the serene course of the silvery orb. For the moon rides on despite the baying of the hound. And we feel sure that the medical profession will continue to combat and relieve human misery, to deserve and win the respect, confidence and gratitude of countless thou-

sands, long, long after those who bay against it in health, and would quite possibly turn to it in the final necessity, shall have become no more than impotent dust.

J. U. G.

The outstanding event of a social nature in local medical circles was the card and dancing party given by the Woman's Auxiliary of the Salt Lake County Medical Society in the new Medical Arts Building the night of March 1. In the nature of a housewarming, this was the first social affair held in the new structure, and was a very pleasant and brilliant success. With an excellent orchestra to furnish the music for dancing in the lecture auditorium, which was tastefully decorated with lamps and flowers, with card tables on the mezzanine floor which was trimmed with floor lamps and brilliant rugs, with punch and light refreshments, and with personally conducted tours of inspection of the building extemporaneously arranged by the doctors occupying space for their friends, the evening passed in an enjoyable fashion.

Some eighty couples were present during the evening and Dr. Fred Stauffer, to whom so much of the successful erection and opening of the first strictly professional structure in Salt Lake is due, acted as the official host, explaining to the guests in a few remarks the inception of the idea which has now resulted in such admirable concrete form.

The committee in charge consisted of Mrs. J. U. Giesy, Mrs. Earl Van Cott, Mrs. John Z. Brown, Mrs. T. H. Morton, and Mrs. E. D. Hammond, president of the Auxiliary for the present term.

The Utah County Medical Society held the first meeting of the month the evening of March 2. Following the usual custom the meeting was preceded by dinner at the Roberts Hotel, after which the scientific program was heard. At this meeting the speaker of the evening was A. J. Hosmer of Salt Lake City, who read an interesting and instructive paper on the subject of "Burns and Skin Grafting," in which he described a new method of treating severe burns through a method of immobilization of the burned areas by means of plaster casting and wire bridging so as to permit of the treating of the burned surface as an open wound.

The second meeting of the month was held the evening of March 16. After the supper J. U. Giesy of Salt Lake addressed the society on the subject of physiotherapy, giving a general consideration to the various modalities now more commonly employed in this field of medical work.

Both meetings were followed by brief business sessions before adjournment.

The Program Committee of the state meeting scheduled for June, Dr. John Z. Brown, chairman, announces that several men have accepted the invitation to be present and appear on the program during the three days of the meet. California will be represented by three men according to latest advices, and unless the committee is disappointed between now and the opening there will be three or four good men from the East.

The regular meeting of the Holy Cross Hospital Clinical Association was held the night of February 21, 1927.

An interesting case of monstrosity was presented by Galligan.

The principal paper of the evening was by T. A. Flood on "The Clinical Significance of the Metabolism Test." The doctor gave a masterly exposition of the subject and illustrated a part of his paper with lantern slides, besides demonstrating the apparatus used in making the test and working out several theoretical cases on the blackboard, to show how the final estimations and their significance are evaluated from the data furnished by the records of the machine.

Besley exhibited a case of foreign body in the stomach, the body in this case being a needle which had apparently

fallen from the dress of the patient's mother while she was cooking hot-cakes for breakfast.

Salt Lake County Medical Society held a regular meeting in the assembly room in the Medical Arts Building, Salt Lake City, Monday, March 14, 1927, with forty-two members and two visitors present.

Minutes of the previous two meetings were read and accepted without correction.

Paul S. Richards of Bingham, Utah, talked on the "Treatment of Epidemic Cerebrospinal Meningitis." He stressed the importance of drainage and specific therapy. He outlined in detail the technique of spinal puncture and the obstacles that may be met, and also described dosage and frequency of the specific serum and showed temperature records on several of his patients.

This very interesting paper was discussed by D. L. Barnard, J. R. Llewellyn, H. H. Pace, J. J. Galligan, F. M. McHugh, E. L. Skidmore, and G. G. Richards.

F. Leaver Stauffer reported thirty-two of his patients on which bronchoscopy had been done. He showed foreign bodies which had been removed, and in his discussion outlined the methods used in removing the offending articles. In conclusion Stauffer showed films on some of his patients.

This very interesting paper was discussed by F. M. McHugh, Vivian White, and R. Mark Brown, who showed some x-ray films of foreign bodies.

Application for membership from the following men were read: R. Mark Brown and L. E. Warenski.

Adjournment at 9:50 p. m.

M. M. CRITCHLOW, *Secretary*.

In Memoriam—Walter E. Ellerbeck, M. D., 54, one of the prominent physicians and surgeons of Salt Lake, died suddenly Thursday morning at 8:30 o'clock at the family residence, 955 East South Temple Street, of acute dilatation of the heart. Doctor Ellerbeck had been ill but three days, and his death was a distinct shock to his family and friends.

After receiving his primary education in the public schools of Salt Lake he attended the University of Pennsylvania at Philadelphia and was graduated from this institution in 1894. The following two years he spent as an intern at the Presbyterian Hospital in Philadelphia and then returned to Salt Lake to commence his private practice.

Doctor Ellerbeck was a member of the Utah State Medical Association and was its secretary for nine years. He was also a member of the Salt Lake County Medical Association and the American Medical Association.

Out of respect to Doctor Ellerbeck, the party of the Auxiliary of the Salt Lake County Medical Association, scheduled for Saturday night at the Medical Arts Building, was postponed.

Dr. M. Skolfield has just been appointed a member of the newest branch of the medical profession, that of air medicine. Dr. Louis H. Bauer of the aeronautical branch of the department of commerce, said that negotiations are now pending with leading medical schools of the United States for the purpose of establishing air medicine courses.

He said the aviator requires several physical qualifications peculiar to his profession, one of which is to see out of the corner of his eye when looking straight ahead in order to pick up other planes. He must also have a nervous system which is capable of withstanding much wear and tear, and his keeping in condition can only be accomplished by physicians who make a specialty of the changes in the human body while it is away from its natural element.

Doctor Skolfield will be a part of the nucleus of the corps of examiners of recruits for air medical colleges.

William O. McCracken, aviation assistant to Secretary Hoover, said that he looks forward to the day when a specially qualified physician will be on duty at each important airport, giving assurance of the capacity of pilots to direct their loads of passengers and freight safely through the upper regions.

NEWS

The Pacific Coast Surgical Association held its second annual meeting in Del Monte, February 25 and 26, with Stanley Stillman, San Francisco, presiding. There was a large attendance, notwithstanding the heavy rains attendant with washouts. Many of its members from the North were en route five days and nights. On reaching Del Monte they were welcomed by the warm rays of the sun. The scientific papers elicited much discussion. In the afternoons recreation was had in golf and motoring. Saturday evening the association dinner was held in the Copper Cup Room, and was graced by the presence of the wives of the members. Clarence Toland, Los Angeles, officiated as toastmaster and addresses were made by Stanley Stillman, San Francisco; Thomas W. Huntington, San Francisco; W. D. Kirkpatrick, Bellingham, Washington; Doctor McNorthney, Tacoma, Washington; Doctor Swindt, Pomona; and J. Tate Mason, Seattle.

It was decided to meet in Portland the same time next year. The following officers were elected: Robert C. Coffey, Portland, president; A. S. Lobingier, Los Angeles, first vice-president; George W. Swift, Seattle, second vice-president; and Edgar L. Gilcreest, San Francisco, secretary-treasurer.

The men who constitute the council are: Thomas O. Burger, San Diego; J. Tate Mason, Seattle; Harold Brunn, Philip K. Gilman, Stanley Stillman, San Francisco.

First resolution proposed by Horace G. Wetherill, Monterey, California, and adopted by the Pacific Coast Surgical Association, at the second annual meeting in Del Monte, February 26, 1927.

Lister Centennial

Resolved, That the Pacific Coast Surgical Association act as sponsors for certain memorial meetings to celebrate the one hundredth anniversary of the birth of Joseph Lister, and that the president of the Association is hereby directed to appoint four committees of five Fellows of the Association each, one for the state of Washington, one for the state of Oregon, one for northern California, and one for southern California.

Resolved, That it shall be the duty of each of these committees to arrange for a meeting in its territory on the fifth of April next (1927) to which meeting Fellows of the Pacific Coast Surgical Association, all members of the regular medical profession, nurses' associations, members of scientific societies, clergymen of all denominations, members of bar association, and, if deemed best, the public, may be invited.

Resolved, That Seattle, Portland, San Francisco, and Los Angeles be designed as the places in which these *Centenary Jubilee Meetings* shall be held, that suitable speakers and ceremonies shall be selected and arranged in order that the service to humanity and to surgical science of the *Founder of Modern Surgical Science*, Joseph Lister, may be duly acknowledged by a grateful people; giving opportunity for an expression of our appreciation of his inestimable gift to us all, and that we may pay tribute to his memory and give thanks for his beneficent endowment for the cure of disease, the relief of suffering and the prolongation of life for all mankind.

The University of California Medical School, San Francisco, offers courses for qualified physicians in General Medicine, Pediatrics, Gastrointestinal Diseases, Dermatology, Syphilology, Radium Therapy, General Surgery, Orthopedic Surgery, Otorhinolaryngology, Ophthalmology, Genitourinary Diseases, Surgical Pathology, Roentgen Ray, Obstetrics and Gynecology, Circulatory Diseases, Laboratory Diagnosis, Neurology and Neuropsychiatry, in its summer term beginning June 6 and ending July 2.

The Alexander Sanitarium, Incorporated, at Belmont, California, recently opened their new occupational therapy

building, Hamilton Memorial. Many physicians and friends of the institution took part in the dedication exercises.

President Albert Soiland announces that the American Radium Society will hold a two-day session at the Hotel Mayflower in Washington, on Monday and Tuesday, May 16 and 17, which is just prior to the session of the American Medical Association.

On these two days, members of the American Radium Society will present papers on general radium therapy. All Fellows of the American Medical Association who are in Washington at this time are cordially invited to attend the sessions.

Externship in Dermatology and Syphilology—Stanford University Medical School—On August 1, 1927, an appointment to this position will be made for the year 1927-28. Salary, \$75 per month. About 300 syphilitics per week, and an average of thirty dermatological cases per day are treated. There are ample opportunities and facilities for research. Applications must be filed before June 1, stating age and educational qualifications of candidate. Address Harry E. Alderson, M.D., Clinical Professor of Medicine (Dermatology and Syphilology), Stanford Medical School, San Francisco.

The Los Angeles Surgical Society held a meeting March 11, at the California Lutheran Hospital.

Program: The Diagnosis of New Growths of the Intestine, Maurice Kahn; Surgical Treatment of New Growths of the Intestine, Rea Smith; and the Roentgen or X-Ray Diagnosis of Diverticulosis and Carcinoma of the Colon, William B. Bowman and Ray Carter.

Illinois State Medical Society Special Trains to A. M. A. Meeting—The Illinois State Medical Society is running a special train to Washington, D. C., over the Pennsylvania Railroad for the A. M. A. meeting in May.

Chicago is the transfer terminal for physicians coming from your district. Travel on this special train will undoubtedly hold many pleasurable features that otherwise would be unavailable. In addition to this opportunity for fraternization among doctors from Illinois and states north and west, there is a certain amount of professional pride in making of this "Special" a banner train. The schedule of train service is as follows: (These trains will be on the Pennsylvania Railroad.)

Leave Chicago, 1 p. m., May 15-16.

Arrive Washington, 9 a. m., May 16-17.

Additional special car service on the Liberty Limited, May 14 and 17, and the Pennsylvania Limited, May 14, 15, 16, and 17.

Liberty Limited—Leave Chicago, 1 p. m. Arrive Washington, 9 a. m.

Pennsylvania Limited—Leave Chicago, 5:30 p. m. Arrive Washington, 4:20 p. m.

Address inquiries and reservation requests to Mr. W. E. Blachley, Division Passenger Agent, Room 524, Union Station, Chicago.

Nurses' Alumnae Present Gift—The graduate Nurses Alumnae of St. Mary's Hospital were hostesses at a very enjoyable "at home" given recently to the Sisters of Mercy in the spacious auditorium of the hospital. A unique program was presented and at its close, a purse was presented to the Sisters for the new chapel, which forms part of the beautiful new addition to the hospital now in course of construction.

Sister Superior M. Paschal thanked the Alumnae for their generosity not only on this but for many evidences on former occasions.

St. Luke's Hospital at Twenty-seventh and Valencia streets, San Francisco, has inaugurated a free clinic in oral and plastic surgery, which is being held in the Clinic Building every Thursday afternoon at 2 p. m.

The Franklin Hospital Clinical Society met on Friday, February 4, in the hospital auditorium.

Doctor Shiels presented two cases: one, an early Ray-

naud's disease; and, two, a case of lues of the nervous system. Doctor Weil presented two cases of carcinoma of the rectum at different stages.

Shiels emphasized the importance of early diagnosis. He also enlarged upon the differential diagnosis associated with Raynaud's disease. Interesting discussion took place regarding prophylactic treatment and the surgical possibilities in the effort to prevent gangrene.

Weil demonstrated specimens of malignancy of the rectum, and described the surgical method associated with the removal of the mass.

Doctor Gehrels enlarged upon the treatment of such malignancies, and reported the results of his Kraskey operations. He also demonstrated patient who had undergone this operation in the clinic of Doctor Weil.

A second meeting of the Franklin Hospital Clinical Society was held on Friday, February 18.

Weil presented another "Raynaud's" of advanced type which had undergone operative procedures.

A third meeting of the Clinical Society took place in the x-ray room of the hospital on Friday, March 5. This meeting was under the direction of Dr. George Hartman, who took up as his subject "Tuberculosis of the Genito-urinary Tract," paying particular attention to tuberculosis of the kidney. He made a strong plea for the early diagnosis of kidney tuberculosis, and presented a number of very interesting x-ray pictures.

Doctor Hartman then read reports of cases operated upon by him, and stated that the earlier the kidney was removed the less chance there would be for bilateral involvement. He also declared that very intimate search for primary focus should be correlated with the aid received from a stereoscopic study of kidney plates.

Doctor Shiels showed x-ray plates of a Japanese patient who arrived in the hospital with a provisional diagnosis of liver abscess, made at the Salinas County Hospital. He told that the physical signs were typical of empyema, but that the fluoroscopic examination suggested that the aforesaid diagnosis of liver abscess seemed to be the correct one, and that flat plates taken anteriorly and posteriorly and laterally seemed to warrant the fluoroscopic diagnosis.

S. G. Kreinman, who has been chief resident of California Lutheran Hospital since 1925, has resigned to enter practice in the office of F. L. Anton, Pacific Mutual Building, A. O. Sanden, until recently assistant surgeon at Soldiers' Home Hospital, Sawtelle, succeeds Doctor Kreinman. The California Lutheran Hospital at present has an intern staff of nine. This will be increased to twelve July 1.

Now that we have heard from the pulpit and through the editorial columns of the press concerning the causes of a series of suicides among university students occurring of late, it might be appropriate to hear from those whose business it is to observe, study, and treat this class of individuals.

From the pulpit we find the explanation in the "gorging and forcing the mind before it is mature," particularly with "speculative theories of psychology, sociology, and subjects which call for maturity of intellect for their mastery or comprehension." The press approaches the truth in defending our courses of study and emphasizing the "neurotic life of these piping days," and calling attention to the fact that the suicide rate among students falls considerably below that of the average of the general population.

All, however, have quite forgotten to take into consideration the individual equation. These individuals are emotionally unstable and are only exhibitions of "shell shock" in times of peace. We always have had and always will have them, and but for their early passing they would in all probability have developed a "mental state" under some subsequent mental strain. The emotionally unstable are ever subject to suggestion, and the wide advertising of the "students' suicide parade" by the press serves only to increase the numbers. Most of these individuals were never intended for a student's life, and failed before they started. Some day there will be a more careful appraisal of physical and mental qualifications of those entering our industries, professions, and universities.

—Editorial, *Wisconsin M. J.*

CALIFORNIA BOARD OF MEDICAL EXAMINERS

By C. B. PINKHAM, M. D., Secretary

According to recent reports, J. Franklin Balzer, licensed naturopath, together with Mrs. Margaret Rowan, has been accused of attempting to murder Dr. Burt Fullmer as the result of a factional fight of the Seventh Day Adventist Reformed Church in Lankershim.

The magazine section of the *Los Angeles Examiner* of March 6, 1927, printed a full-page article on the beauty specialists which contained much of interest, particularly in view of the pending legislation for a bill to control the operation of the so-called "cosmetologists."

A new trial was ordered by the District Court of Appeals yesterday in the case of Dr. W. W. Homan, a dentist, 3323 Mission Street, whose license was revoked by the State Board of Dental Examiners in 1925. The board charged that Doctor Homan had purchased a license for an assistant from a Chicago doctor. . . . — *San Francisco Examiner*, March 9, 1927.

Carleton W. Faull, Oakland physician, whose notorious Globe Medical Dispensary at 773 Market Street was closed in 1915 through a crusade by the *Call*, was cited today to appear before the State Board of Medical Examiners . . . to show cause why his license to practice should not be revoked. . . . In an official report to Dr. Charles B. Pinkham, secretary-treasurer of the State Board of Medical Examiners, Special Agent Henderson today said that "Faull is now connected with two street fakirs at 1006 Broadway, Oakland, in the sale of nostrums called Zan and Arlo Balm." . . . The lecture is the ordinary "soap-box" oration, the speaker appearing in Oriental garb consisting of a colored turban, long Turkish robe, crystal ball and many jewels, one speaker decorating himself with two large snakes. . . . — *San Francisco Call*, February 25, 1927.

According to a report filed by our Special Agent Carter, Dave Goldring was on February 21, 1927, charged with practicing chiropody in Los Angeles in violation of the law, it having been reported that he so seriously cut the foot of the complainant that it was necessary to send him to the Los Angeles General Hospital.

Said to be wanted for passing bad checks in Huntington Beach and of grand larceny embezzlement of an automobile in Los Angeles, Dr. O. Hickens Glemstead, alias O. Hickman, etc., was arrested by Inspector Harry Vincent of the Immigration Board of Patrol yesterday. Police are holding Glemstead for Northern authorities. — *San Diego Independent*, February 10, 1927.

A fake sick call was used by two men early today for the purpose of decoying Dr. Frederick T. Grant, 3401 London Street, into a dark alley on Fremont Avenue between First and Second streets, and robbing him of \$500, a gold watch and chain, and a special deputy sheriff's badge, according to the physician's report of the crime to the police. . . . (*Los Angeles Herald*, February 11, 1927.) The records of the Board of Medical Examiners do not show anyone by this name licensed under the Medical Act.

The Harrison Narcotic Act must not be invoked to curb the sale and use of habit-forming drugs, United States District Judge George M. Borquin declared yesterday. Asserting that the Federal Narcotic Drug Statute is a revenue measure, pure and simple, Judge Borquin indicated that he would impose no prison terms or heavy fines upon its violators. Backing up his decision he imposed a nominal fine of \$5 and costs upon Jerry Millisack, one of the most notorious drug peddlers on the Pacific Coast. . . . Millisack recently finished a two-year sentence in the penitentiary, where he was sent for violation of the Narcotic Act. When he was arrested in 1924 he had more than \$100,000 worth of money and jewelry in addition to a quantity of drugs. On January 11 of this year, Millisack was arrested by federal operatives at 485 Eddy Street. No charge of sale was made against him, but he was accused of having fifty ounces of drugs in his possession, on which no tax had been paid. He pleaded guilty to the charge through this attorney, Thomas J.

Reardon, and was fined \$5 and the costs of prosecution, a matter of a few dollars. He was also directed to pay the tax of one cent an ounce on the fifty ounces in his possession. — *San Francisco Examiner*, March 15, 1927.

On February 25, 1927, in the Superior Court of Los Angeles County, the case against Dr. Allen I. Mann, in which the defendant was arrested by the State Pharmacy Board September 11, 1926, charged with selling morphin and cocaine in violation of the State Poison Law, was dismissed, according to the report of our special agent.

Love barred prison doors against Florence K. Patton, former bank clerk, yesterday. Miss Patton, who refused to promise to stop associating with Dr. Leon Katz as a condition to her being admitted to probation, was sentenced to one to fourteen years in San Quentin by Judge Elliott Craig. . . . (*Los Angeles Examiner*, March 5, 1927.) The records of the Board of Medical Examiners show no one by the name of Leon Katz licensed to practice under the Medical Act.

Complaint was recently filed in the Justice Court of Colton, charging Petronilo M. Montanez with violation of the Medical Practice Act, he having been accused of treating various Mexicans in the vicinity of San Bernardino.

Tampa, Florida, March 13, 1927. Dr. George A. Munch, convicted head of a "diploma mill," said to have been operated here since 1921, was sentenced to five years imprisonment in the Federal Penitentiary at Atlanta and a fine of \$1000 in Federal Court today. Notice of an appeal was filed by defense attorneys. (*San Francisco Examiner*, March 19, 1927.) According to the *Journal of the American Medical Association*, September 18, 1926, page 946, "Doctor Munch, one time secretary of the Florida Eclectic Board of Examiners, is alleged to have sold diplomas, presumably from defunct institutions, and to have granted licenses to practice in Florida and elsewhere to persons not properly qualified, for fees ranging from 200 to \$2000." If the "diploma mill" bill, introduced by the Board of Medical Examiners, becomes a law, California will have a most effective method of handling unscrupulous dealings in fraudulent diplomas, state licenses, etc.

The attention of the Board of Medical Examiners has recently been called to an advertising circular bearing the name of Morris Myo Method of Foot Correction, relating to a mail-order course and a diploma granting full privilege to practice the Morris Myo Method of Foot Correction. The records of the Secretary of State do not show any such institution incorporated in California.

Physicians are warned to carefully watch their medical cases and leather bags, there being reported a state-wide theft of such articles from physicians' machines, evidently on the part of narcotic addicts, inasmuch as some of the victims of these thefts report that nothing had been disturbed in their bags except for the removal of the narcotic content.

Our special agent recently reported a warrant had been issued charging Grace M. Norton with violation of the Medical Act at Santa Monica, it being alleged, among other things, that she held a diploma from the "Brotherhood of Light" or the "Great White Brotherhood," recently featured in the newspapers in connection with a court hearing now being held in Oakland.

Dr. A. M. Pond, Upland physician, was within his legal rights in committing himself to the Southern California State Hospital at Patton, Stanley Mussell, former member of the District Attorney's staff, announced yesterday. Doctor Pond asked that he be admitted to Patton for treatment after he pleaded guilty in the Superior Court to driving an automobile while under the influence of intoxicating liquor. — *Ontario Report*, February 5, 1927.

Denied his plea for probation, Dr. Paul Sandfort of Berkeley yesterday was sentenced to pay a fine of \$200 and spend three months in the Alameda County jail for violating the State Medical Practice Act. Doctor Sandfort was accused of practicing medicine without a license after he was retained to minister to a Novato woman in November, 1925. After a long delay he pleaded guilty and requested probation, but the adult probation officer,

Robert Tyson, recommended that probation be denied and Superior Judge Leon E. Gray approved the recommendation.—*San Francisco Examiner*, March 9, 1927.

Portland, Oregon, March 1.—Charged with violation provisions of the Postal Code, Mrs. Lillian G. Stevenson, a physician and surgeon of Astoria, was committed to jail here today by Federal Judge Bean until \$250 is posted. The charges grew out of postcards Doctor Stevenson is alleged to have sent to persons and officials connected with a dispute arising over commitment to the Washington State Children's Home at Spokane of a child she sought to adopt. Wording on the cards, according to postal authorities, was such as to cast reflection on persons who received them.—*San Francisco Chronicle*, March 2,

Mrs. Mabel Burkhard is entitled to damages of \$500 from Dr. Carl Schultz and the Naturopathic Institute and Sanitarium of California, according to a verdict returned by a jury in Judge Bishop's Court, which heard her suit, wherein she charged that the doctor had wrongly diagnosed her ailment as cancer. While the jury decided that she was entitled to damages for negligence, it also held that she must pay a \$315 note which she had given Doctor Schultz on account of his fee, and hospital charges, together with interest and attorney's fees, which make the judgment on the note practically offset the damage award.—*Los Angeles Times*, February 7, 1927.

E. L. Swick was fined \$600, with the alternative of 180 days in jail, by Judge Elwood Henderson of Ventura, sitting in the Superior Court Tuesday, following conviction last week by a jury on charges of practicing medicine in violation of the State Medical Practice Act. In handing down the decision the judge severely scored the defendant, expressing it as his opinion that the law had been wilfully violated and that many people had been charged exorbitant fees for treatment rendered. . . . Swick, through his attorney John R. Stowe, filed notice of appeal.—*San Luis Obispo Telegram*, February 15, 1927.

Responsibility for the death of Elton McMahon, drowned off Pier 46, January 27, was placed on Dr. J. Felton Taylor by a Coroner's Jury verdict yesterday. It was recommended that his driver's license be revoked for one year. . . .—*San Francisco Chronicle*, February 12, 1927.

A. M. Welden, masseur, 434 Second Street, Monday pleaded not guilty to practicing chiropractic without a license. He was arrested by H. A. Miller of the State Board of Chiropractic Examiners and brought before Judge Vaughan where he entered his plea. . . .—*Santa Rosa Republic*, March 8, 1927.

Dr. Walter J. Wenzel, prominent Hollywood physician and surgeon of 1030 North Fairfax Avenue, was under arrest today on a charge of violating the State Narcotic Law. According to Police Officer Boshardt, who made the arrest, Doctor Wenzel sold \$10 worth of morphin to a police operative and accepted marked money.—*Los Angeles Record*, February 25, 1927.

Dr. W. A. Williams, alleged "store-front physician" charged with the "medical murder" of pretty Evelyn Frances Taylor, University of California co-ed, will not know his fate until Tuesday, when his case will be submitted to the jury. Doctor Williams, the prosecution charges, killed the pretty college girl when he operated on her illegally. . . .—*Los Angeles Record*, March 12, 1927.

Charging that neglect and unskillful application of the x-ray resulted in severe x-ray burns that caused the death of M. J. Hanmore, suit for \$30,000 damages was filed today in the Superior Court, Santa Ana. . . .—*Fullerton News-Tribune*, February 17, 1927.

TRUTH ABOUT MEDICINES

New and Nonofficial Remedies

(Abstracts from reports of Council on Pharmacy and Chemistry, A. M. A.)

Note.—These do not represent all of the actions of the Council, but they do represent those remedies manufactured by firms who cooperate with California and Western Medicine in its advertising columns, and thereby with the physicians in California.

In addition to the articles previously enumerated, the following have been accepted:

Bismuth Salicylate Oil (P. D. & Co.)—A suspension of bismuth salicylate U. S. P. (New and Nonofficial Remedies, 1926, p. 97) in a liquid composed of camphor, 10 per cent; creosote, 10 per cent; olive oil, 80 per cent. Each cc. contains bismuth salicylate, 0.13 Gm. (2 grains). Parke, Davis & Co., Detroit.

Glaseptic Ampules Bismuth Salicylate in Oil (P. D. & Co.), 1 cc.—Each ampule contains 1 cc. of a suspension of bismuth salicylate U. S. P. (New and Nonofficial Remedies, 1926, p. 97.) 0.13 Gm. (2 grains) in a liquid composed of camphor, 10 per cent; creosote, 10 per cent; olive oil, 80 per cent. Parke Davis & Co., Detroit.

Erysipelas Streptococcus Antitoxin (Lilly) (Concentrated Globulin)—An erysipelas streptococcus antitoxin (*Journal A. M. A.*, August 28, 1926, p. 671) obtained by injecting horses subcutaneously with strains of hemolytic streptococci obtained from Dr. A. R. Dochez from human cases of erysipelas lesions, bleeding the horses, and when test bleedings show the serum to have reached the desired potency, bleeding as plasma which is concentrated and refined. Marketed in syringe containers (therapeutic doses) containing 5000 "units." Eli Lilly & Co., Indianapolis.—*Journal A. M. A.*, February 5, 1927, p. 403.

Antistreptococcic Serum (New and Nonofficial Remedies, 1926, p. 339)—This product is also marketed in 20 cc. and 50 cc. piston syringes. Parke, Davis & Co., Detroit.

Ricinoleated Scarlet Fever Antigen Immunizing (Lilly)—This product is prepared from whole broth cultures of scarlet fever streptococci, containing 1000 million organisms in each cc. modified with 2 per cent of sodium ricinoleate. It is marketed in 1 cc., 5 cc. and 20 cc. vials. Eli Lilly & Co., Indianapolis.—*Journal A. M. A.*, February 19, 1927, p. 567.

Ephedrin—The Council on Pharmacy and Chemistry states that the reports which have been issued since its first report was published, warrant the acceptance of the drug for New and Nonofficial Remedies and the recognition of acceptable brands if the firms which market them will agree to be conservative in their claims. The Council report is accompanied by a report of the A. M. A. Chemical Laboratory on the establishment of standards for ephedrin hydrochloride and ephedrin sulphate. The Laboratory's report shows that the ephedrin hydrochloride of the Abbott Laboratories and of Burroughs, Wellcome & Co. meet the provisional standards, but that a pure sulphate has not yet been prepared. However, it appears that the study which is being made in the laboratories of Eli Lilly & Co., gives promise that a satisfactory product will shortly be available. The Council (1) endorsed the report of the A. M. A. Chemical Laboratory and provisionally adopted the submitted standards for ephedrin hydrochloride; (2) it admitted ephedrin to New and Nonofficial Remedies; (3) it voted to accept the ephedrin hydrochloride of the Abbott Laboratories when acceptable advertising is issued; (4) it voted to accept the ephedrin hydrochloride of Burroughs, Wellcome & Co. when it is marketed in the United States and acceptable advertising is issued; and (5) it voted to accept Ephedrin Sulphate—Lilly (formerly called "Fedrin") when the firm has achieved satisfactory standards and when the advertising is found acceptable.—*Journal A. M. A.*, February 12, 1927, p. 482.

For the modern physician there is no doubt that to study the whole man, regardless of his malady—a practice much in vogue until forty or fifty years ago—is no longer the fashion. Undoubtedly this lack of interest in the man is but a temporary bad habit into which medical students have fallen as a by-product of the idea of the laboratory's infallible efficiency which modern medical instruction delivers to them. The main object of the doctor's endeavor has perhaps for the moment been to some extent obscured by those very technical bacteriological and chemical details which are, indeed, so essential to his success.—George Draper, M. D., *Harper's* (March).

BOOK REVIEWS

This column is conducted solely in the interests of California and Western Medicine readers. Critical comment, favorable and unfavorable, purely from the standpoint of the interests of the medical reader, will be made about books selected from the larger number acknowledged in the Books Received column. The advertising columns are open to book publishers who wish to make additional statements about their publications.

Orange County Medical History. By C. D. Ball, President Orange County Medical Society.

In writing this well-printed, beautifully bound volume, Doctor Ball has rendered a distinctive service in the history of California medicine. The chapter on the medical pioneers of Orange County is perhaps the most interesting to the general reader, but those devoted to the organization and history of the County Medical Society and the development of public health are usefully constructive. Short biographical sketches (mostly illustrated) of pioneers and living physicians add to the value of the book. Orange County Medical History establishes an excellent groundwork for the historian who must some day extend and dramatize this most interesting phase of the history of California.

Doctor Ball is to be congratulated on his research and industry, and on the success of a pioneer effort in a neglected field of medicine.

This Business of Operations. By James Radley. The Digest Publishing Company, Cincinnati.

An entertaining little story relating the experiences of a patient before, during and after an operation. This story has been better told by others, but Mr. Radley is such an enthusiastic booster of physicians, nurses, hospitals, that his message is a good one to read and perhaps pass on to selected patients.

Pediatrics. By various authors. Edited by Isaac A. Abt. Vol. VIII. Pp. 102. Illustrated. Philadelphia and London: W. B. Saunders Company, 1926.

Volume VIII of Doctor Abt's "System of Pediatrics" dealing with the diseases of the skin, ear and eye, as well as the subject of infant hospitals, medico-legal questions in the practice of pediatrics, tumors of infants and children, and parasitology in childhood, may well be ranked among the leading works in the field of pediatrics.

The book is well written, well organized, and extremely interesting. Doctor Abt has had as collaborators for this volume such men as Drs. John Dodson, Oliver Ormsby, Oscar Schultz, George Shambaugh, and Casey Wood. They have all contributed chapters dealing with their own specialty.

The chapter on skin affections of congenital origin by Dr. Clarke Finnereed is especially well organized and written, as is the excellent article on animal parasites by Dr. Henry Ward.

All in all, this volume of Doctor Abt's is a valuable contribution to any medical library and will well repay anyone to read it carefully.

Plastic Surgery of the Head, Face, and Neck. By H. Lyons Hunt. Illustrated. Philadelphia and New York: Lea & Febiger, 1926.

This book is fairly comprehensive in its scope in spite of its limitation to 400 pages.

The historical review of the opening pages is an excellent account of the development of plastic surgery.

Other chapters deal with the application of modern principles of plastic surgery as related to repair of defects, especially those of the face. The author has drawn freely on methods and case illustrations of various authorities in this field, thus collecting accepted technique to a very recent date.

The brevity of the volume has, to an extent, curtailed its value, the scarcity of detail in description of technique of the operative procedures making the volume of less value to the general practitioner than to the specialist. This fault is in part offset by the pleasing and lucid style of the author, and the absence of ponderous and unnecessary reiteration.

Gout and Other Diseases of the Thyroid Gland. By Arnold S. Jackson. Pp. 401. Illustrated. New York: Paul B. Hoeber Company, 1926.

Another comprehensive and authoritative textbook on diseases of the thyroid gland has come to us from the hands of one thoroughly skilled in this more or less specialized field of medicine. This volume is all the more appreciated on account of the paucity of good works on the subject.

Jackson clearly outlines the generally accepted classification of goiter and details methods of dealing with each type. The carefully controlled method of administering iodine in the treatment of adolescent goiter and Graves' disease, is worthy of close scrutiny. Equally important are his reasons for not giving iodine to patients with adenomata.

The importance of the basal metabolic rate is over-emphasized. He should have stressed the necessity of more exacting clinical study and the interpretation of these findings, for we all know how often a poorly made laboratory test has been the means of the wrong kind of treatment at a critical period in the disease.

No physician should attempt to treat disease of the

thyroid gland until he thoroughly understands the underlying gross and microscopic pathology, and in this Jackson is very clear. The cuts and descriptions of the pathology of the thyroid gland are excellent.

His preoperative preparation of the patient is to be commended, and the operative technique, as given, is worthy of intensive study. It is to be regretted that he finds it necessary to cut the ribbon muscles, because with proper skin-flap dissections, this can be eliminated. If the wound is dry after the resection of the diseased portions it is never necessary to leave a drain in the incision. Jackson sutures the platysma muscle separately, a procedure which always gives a good cosmetic result—a point not to be overlooked in any operation, especially on exposed areas of the skin where the preponderance of sex is on the female side, as it is in this group of diseases.

There is included a rather formidable list of publications given as references.

Taken as a whole the book is excellent, but offers practically nothing new in the treatment of disease of the thyroid gland to those already familiar with the subject.

The Thyroid Gland. By Charles H. Mayo and Henry W. Plummer. Pp. 83. St. Louis: C. V. Mosby Company, 1926. Price, \$1.75.

Amidst the plethora of writings that but serve to intensify the obscurity that surrounds the subject of endocrinology it is life-giving and stimulating to have the recent volume, "The Thyroid Gland," by Mayo and Plummer.

Restraint in praise of the book is almost impossible. Characterized by briefness, succinctness and clarity, the facts of the thyroid gland as medical teachers know them are set forth admirably.

Mayo's discussion of the general subject is complete and illuminating and most pertinent. Plummer follows with details eliminating the nonessential and giving us the best classification and definitions yet proposed.

His summation and expression of his experience and beliefs regarding treatment is admirable and, while brief, is far from being an "outline." He discusses methods for combined treatment and control which should be more extensively followed than they are.

There are two factors in particular which he dwells upon interestingly and with conviction, namely, that in those patients with auricular fibrillation the inhibition of digitalis vastly improves the postoperative convalescence; and his emphasis of the dual dysfunction wherein at times both iodine and thyroid must be exhibited in conjunction to produce the desired result.

Among all the books and brochures published upon this perennially fascinating condition there is none that is more informing or practical for the education and use of student, practitioner or specialist.

Fundamentals of Dermatology. By Alfred Schalek. Pp. 239. Illustrated. Philadelphia and New York: Lea & Febiger, 1926. Price, \$3.

This book of about 200 pages is admirably adapted for use by the medical student and general practitioner; the fundamentals are presented in a concise and thorough manner, and the illustrations are particularly clear.

The alphabetical arrangement of diseases which has been used here is a departure from the usual, however, the classification given immediately under each disease title is entirely adequate and perhaps less confusing to one not making a special study of dermatology.

After a year's experience as president of the Academy of Medicine of Toledo and Lucas County, Dr. Edward J. McCormick, in his presidential address recently delivered, pointed out the need for greater cooperation among physicians and the value of organization activities as a means of stemming the tide of social medicine.

"Many there are," Doctor McCormick observed, "who feel that socialized medicine is only a myth—an imaginary 'bug-a-boo'—ammunition for the pessimist and calamity orator. Those of us who have shared tents and billets with fellow medical men on the continent during the great war, or to those of us who have practiced in England—and there are several—state medicine represents a horrible aspect.

"A threat which cannot be disregarded if we, like Hippocrates, desire our skill passed on to the younger men, to our sons and future generations. English and German physicians have reached the highest peak of medical and surgical excellence. They have traveled the one road only, and today they are in great share reduced to destitution and poverty because of the inroads made by state medicine.

"Following economic and legislative catastrophe there comes to them gradually, scientific decline which will surely undo the work of centuries. I speak not in a theoretical mood, but in cold, hard reality, and only when the rank and file of physicians see and realize the situation will we be able to erect proper fortresses of protection.

"State medicine can be foisted upon the American public and it will be difficult to dislodge once it is endorsed by the hopeful but unknowing voter."—Editorial, *Ohio State M. J.*